

## MSS40111 Certificate IV in Sustainable Operations

This qualification provides the skills and knowledge required to lead the implementation of sustainability related initiatives in a section of an organisation. The qualification has been developed with manufacturing operations as a focus. However, because of the range of organisations in a typical manufacturing value chain it may also be applied to other types of organisations. The qualification is also appropriate for a technician or similar person who as part of a broader job role needs to undertake sustainability related work.

The qualification packaging has been developed on an assumption that competency will be developed through a combination of on and off-the-job learning strategies.

### Job roles/employment outcomes

The MSS40111 Certificate IV in Sustainable Operations specifies the competencies required to identify, implement and report on sustainability related initiatives within a section of an enterprise, such as a defined work area, work team or stage of production. It may also apply to a small or medium enterprise. It includes assisting organisations to meet their obligations under sustainability related regulatory arrangements, government or similar incentives or other initiatives that apply to the employee's area of operation.

The qualification also applies where an overview of sustainability related issues is required without the detailed technical underpinning skills, such as resource (e.g. water and carbon) mapping along a value chain, or mass balancing across a site or large enterprise. Where these skills are required the MSS50111 Diploma of Sustainable Operations should be considered.

Employment outcomes related to this qualification may include specialist roles such as a sustainability officer or sustainability project assistant. The qualification also provides specialist sustainability competencies to technical, supervisory or operational employees who do not have whole of enterprise responsibilities.

### Application

This qualification provides sustainability skills that can be applied in the following organisations and environments:

- manufacturing enterprises
- organisations in a manufacturing value chain, such as:
  - suppliers
  - customers
  - distributors, warehouses, transport suppliers and other logistics support organisations
  - professional service suppliers to manufacturing, for example, legal, engineering, accounting, auditing and education and training suppliers.

### Pathways into the qualification

This qualification has no formal entry requirement. However, it should be noted that this qualification does not supply operational or technical skills. Most enterprises will expect technical skills relevant to their operations or equivalent vocational experience and for this reason the qualification is unlikely to be suitable for direct entry from school.

### Pathways from the qualification

Further training pathways from this qualification include the MSS50111 Diploma of Sustainable Operations.

### Additional qualification advice

This qualification provides the skills needed to measure current sustainability performance and to establish processes for improved sustainability performance within small and medium enterprises as well as sections or stages of production in larger organisations. It complements but does not duplicate qualifications supplying production, maintenance, logistics or other technical skills to industry. Where these skills are required appropriate qualifications from Manufacturing Skills Australia (MSA) and other Industry Skill Council (ISC) Training Packages should be considered.

### Licensing considerations

There are no specific licences that relate to this qualification.

### Packaging Rules

To be awarded the MSS40111 Certificate IV in Sustainable Operations, competency must be achieved in **ten (10)** units of competency.

- **three (3)** core units of competency
- **seven (7)** elective units of competency, as specified below.

Note: Units with prerequisites are marked with an asterisk. Refer to the unit for details.

### Core units of competency

- Complete all **three (3)** of the following units of competency.

Unit code	Unit title	P
MSS014001A	Improve sustainability through readily implementable change	
MSS014002A	Evaluate sustainability impact of a work or process area	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

### Elective units of competency

- Complete **seven (7)** units of competency, made up of:
  - a minimum of **three (3)** units from Group A
  - the balance of units, to a maximum of **four (4)**, may be selected from:
    - Group A units, not previously selected
    - Group B units listed below.

### Group A: Specialist elective units

Unit code	Unit title	P
MSS014003A	Optimise sustainability of a process or plant area	
MSS014004A	Develop team strategies for more sustainable use of resources	
MSS014005A	Apply proactive maintenance strategies to sustainability	
MSS014006A	Contribute to sustainability related audits	
MSS015005A	Develop required sustainability reports	
MSS024002A	Implement environmental management plans and procedures	

MSS024003A	Apply an understanding of environmental principles to a site	
LMFFDT4003A	Assess and record the lifecycle of a product	
MSACMT482A	Assist in implementing a proactive maintenance strategy	
MSACMT483A	Support proactive maintenance	
MSAPMOHS401A	Assess risk	
MSAPMSUP301A	Apply HACCP to the workplace	
MSL933003A	Apply critical control point requirements	
MSL934001A	Contribute to the ongoing development of HACCP plans	
MSL974007A	Undertake environmental field-based monitoring	
MSL974009A	Undertake field-based, remote-sensing monitoring	
PMASUP520B	Review procedures to minimise environmental impact of process	

**Group B: Other elective units**

Unit code	Unit title	P
MSS027001A	Coordinate environmental management activities	
BSBR SK401A	Identify risk and apply risk management processes	
LMFFT4007B	Sample, inspect and test products to specifications	
LMTGN4002A	Participate in product engineering	
LMTGN4016A	Contribute to the development of products or processes	
MEM30016A	Assist in the analysis of a supply chain	
MEM13002B	Undertake occupational health and safety activities in the workplace	
MSACMC410A	Lead change in a manufacturing environment	
MSACMC411A	Lead a competitive manufacturing team	
MSACMC413A	Lead team culture improvement	
MSACMS400A	Implement a competitive manufacturing system	
MSACMS401A	Ensure process improvements are sustained	
MSACMS405A	Lead a manufacturing team using a balanced score card approach	
MSACMT230A	Apply cost factors to work practices	
MSACMT260A	Use planning software systems in manufacturing	

MSACMT261A	Use SCADA systems in manufacturing	
MSACMT280A	Undertake root cause analysis	
MSACMT423A	Monitor a manufacturing levelled pull system	
MSACMT430A	Improve cost factors in work practices	
MSACMT440A	Lead 5S in a manufacturing environment	
MSACMT441A	Facilitate continuous improvement in manufacturing	
MSACMT450A	Undertake process capability improvements	*
MSACMT451A	Mistake proof a production process	
MSACMT452A	Apply statistics to processes in manufacturing	
MSACMT453A	Use six sigma techniques	*
MSACMT460A	Facilitate the use of planning software systems in manufacturing	*
MSACMT461A	Facilitate SCADA systems in a manufacturing team or work area	*
MSACMT481A	Undertake proactive maintenance analyses	

A maximum of **two (2)** Group B elective units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificate IV level.

## Employability Skills for MSS40111 Certificate IV in Sustainable Operations

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

<b>Employability Skill Communication</b>	<p><b>Industry/enterprise requirements for this qualification include:</b></p> <ul style="list-style-type: none"> <li>• Oversee implementation of sustainability improvement procedures in section or for stage of production and develop and distribute related information</li> <li>• Distribute and explain standardised documentation on behalf of an area or a work team</li> <li>• Share and discuss information with others about enterprise activities</li> <li>• Communicate workplace procedures</li> <li>• Provide information and clarifications to other employees on workplace procedures in relation to sustainability</li> <li>• Provide and interpret instructions, specifications, standard operating procedures and other work-related documents</li> <li>• Provide assistance or information to relevant personnel</li> <li>• Debrief on workplace changes with relevant stakeholders</li> <li>• Record production, emissions and other work-related information for a work area</li> <li>• Access and use workplace communication tools and equipment</li> <li>• Apply numeracy skills to work procedures</li> <li>• Provide information about team activities to managers, supervisors and customers</li> </ul>
<b>Teamwork</b>	<ul style="list-style-type: none"> <li>• Identify roles of work teams where teamwork is used as the form of work organisation</li> <li>• Supervise and lead others in a production environment</li> <li>• Share work-related information with peers, including team members, supervisors and management</li> <li>• Identify hazards to other employees and visitors</li> <li>• Review changes to work practices and work relationships with team leaders and other employees</li> <li>• Provide assistance with planning work operations as required</li> <li>• Seek assistance with work operations from specialists and other employees as required</li> <li>• Participate in multidisciplinary teams as required</li> </ul>
<b>Problem solving</b>	<ul style="list-style-type: none"> <li>• Monitor team production and maintenance activities and analyse inconsistencies, non-compliances, faults or hazards</li> <li>• Identify factors within work area that are a constraint to work efficiency or reaching of production outcomes</li> <li>• Identify essential and non-essential practices</li> <li>• Implement methods of increasing features/benefits of products or processes</li> <li>• Monitor responsibilities of team and make improvements to work organisation</li> </ul>

- Identify process steps which cause a problem and suggest improvement processes
- Monitor sustainability performance and identify improvement opportunities and processes
- Compare shift or area required performance with actual performance
- Identify situations where compliance to specifications or safety standards is unlikely
- Identify, recommend and implement improvements
- Identify causes of identified faults and take appropriate action
- Investigate causes of deviations from targets and standards in relation to sustainability
- Undertake root cause analysis

**Initiative and enterprise**

- Manage team or area procedures and systems for optimum outcomes
- Provide feedback on procedures and systems
- Analyse problems, implications or suggestions for improvements
- Adjust work activities according to changes in operating procedures or requirements
- Identify methods of increasing contribution of team to sustainability
- Identify and implement changes and improvements
- Monitor processes and equipment to ensure cost efficiency
- Implement and monitor work practices to reduce waste
- Participate in multidisciplinary teams to develop new products or processes

**Planning and organising**

- Ensure work area complies with sustainability obligations and requirements
- Implement improvements in accordance with procedures
- Distinguish between essential and non-essential practices
- Implement use of planning tools within work of team
- Determine and prioritise required actions
- Collect, organise and analyse information from work activities
- Monitor work activities according to safety and workplace standards
- Monitor production targets and outcomes
- Interpret data and information as required by own job
- Ask questions to ensure there is understanding of work requirements in teams and among other employees

**Self management**

- Recommend methods of increasing own contribution to the value chain
- Adjust work processes according to procedures and customer requirements
- Identify and manage impact of change in own work
- Minimise waste in own work activity
- Assess own work performance
- Set personal objectives for work performance
- Manage own time

**Learning**

- Identify skill requirements of self and team members
- Arrange skill development training for self and others
- Adapt to changing work requirements
- Ask questions to aid learning of others
- Identify personal skill gaps and additional skills needs
- Ask questions to ensure understanding of own work requirements
- Monitor own work and identify areas for improvement
- Seek feedback on work performance
- Provide feedback on work performance to team leaders and team members

**Technology**

- Monitor technology to ensure sustainability according to legislative requirements and workplace standards
- Identify equipment and processes appropriate for team jobs and skill levels of team members
- Provide appropriate equipment to ensure safety and efficiency according to skill levels of employees
- Assess operational efficiency of technology within own skill level and that of team members
- Analyse data and other information from equipment reports
- Use information technology appropriate for job
- Manage maintenance procedures appropriate to job and processes according to skill levels of team members

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

The following table contains a summary of the employability skills as identified by industry for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.