



Australian Government

Department of Education, Employment and Workplace Relations

MSS014001A Improve sustainability through readily implementable change

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit of competency covers identifying and implementing readily implementable changes to production or operation procedures to improve sustainability in an organisation or related value chain (e.g. supplier of goods or services or customer) organisations.

Application of the Unit

This unit applies inside organisations and their value chains. The unit 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 unit covers the identification and implementation of changes to operational procedures to improve sustainability. These changes can often be attempted without substantial prior analysis or planning and are often characterised by the colloquial term as ‘low hanging fruit’. This unit applies to employees with work area responsibilities such as team leaders, maintenance staff, technicians and others who have some sustainability responsibility as part of their job.

Measurements covered by this unit are related to measuring the immediate impact of changes on the equipment or area of operation.

The measurement of emissions or other environmental impact is not covered by this unit, although the use of relevant data arising from such measurements may be appropriate.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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| 1 Examine sustainability outcomes required | 1.1 Identify drivers of sustainability change |
| | 1.2 Define sustainability problem or need |
| | 1.3 Consult with stakeholders on a range of possible ways of satisfying the need |
| | 1.4 Agree possible acceptable outcomes with key stakeholders |
| 2 Examine operations for readily implementable changes to improve sustainability | 2.1 Identify current operational and maintenance standard procedures |
| | 2.2 Identify potential sustainability issues in process |
| | 2.3 Short-list potential sustainability issues which may be able to be easily eliminated or improved |
| | 2.4 Rank short-listed sustainability issues by estimated benefit/cost |
| | 2.5 Determine success factors to assess benefits of eliminating waste |
| 3 Implement improvements | 3.1 Develop implementation plan to deliver required outcomes |
| | 3.2 Negotiate required resources with relevant stakeholders |
| | 3.3 Negotiate timelines and measures/indicators of success with change stakeholders |
| | 3.4 Acquire and deploy resources required to achieve agreed outcome |
| | 3.5 Monitor implementation and take action as required to achieve required outcome |
| | 3.6 Renegotiate with relevant stakeholders as necessary |

- 4 Recommend further improvements
 - 4.1 Measure improvements actually obtained
 - 4.2 Identify non-compliances with planned improvements
 - 4.3 Determine additional improvements desirable

Required Skills and Knowledge

Required knowledge includes:

- value chain concept and value chain participants to work area and the organisation more generally
- value chain items where changes can be made
- concept of waste used in lean manufacturing (i.e. muda and the seven wastes)
- brainstorming techniques
- benefit/cost analyses techniques
- methods of quantifying both required outcomes and muda into comparable units of measure
- project improvement planning/scheduling
- process monitoring and critical measures
- AS/NZS ISO 14000 Environmental Management Standards

Required skills include:

- negotiating with employees, including operators, maintenance personnel, office, warehouse and other support staff, contractors, suppliers and customers personnel, to identify easy to implement changes
- analysing standard operational procedures for opportunities for sustainability improvement opportunities and then to implementing the identified changes to operational procedures
- planning out changes to procedures
- solving problems related to implementing readily implementable sustainability changes in a work area
- communicating with stakeholders

Evidence Guide

Overview of assessment	A person who demonstrates competency in this unit must be able to consistently apply sustainability concepts to a work area and identify opportunities for sustainability improvements and then implement the improvements.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>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. Critical aspects of assessment and evidence include:</p> <ul style="list-style-type: none"> • defining a sustainability related need or problem within current operations • identifying waste • identifying readily implemented changes • planning and implementing readily implemented changes to achieve a sustainability related improvement.
Context of and specific resources for assessment	<ul style="list-style-type: none"> • This unit of competency is to be assessed in the workplace or a simulated workplace environment. • Assessment should emphasise a workplace context and procedures found in the candidate's workplace. • This unit of competency may be assessed with other relevant units addressing sustainability at the enterprise level or other units requiring the exercise of the skills and knowledge covered by this unit. • The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team.
Method of assessment	<ul style="list-style-type: none"> • In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. • Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. • The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work-like environment.
Guidance information for assessment	

Range Statement

Sustainability issues	Sustainability issues at this level will frequently be waste (muda – see below) but may also include community or other issues
Waste	<p>Waste in this unit is used in the broader sense of ‘muda’ as used in lean manufacturing and the competitive manufacturing units of competency developed by MSA. Muda is usually summarised under the headings of the ‘seven wastes’ which include:</p> <ul style="list-style-type: none"> • overproduction • delay/waiting • transportation • over processing • excess inventory • unnecessary motion • defects and rework
Documentation	<p>Documentation includes:</p> <ul style="list-style-type: none"> • standard operational procedures • engineering drawings • other sketches and diagrams • specifications and manuals • training and assessment manuals <p>Documentation may be in:</p> <ul style="list-style-type: none"> • any form, paper or electronic
Drivers of change	<p>Drivers of change for this unit are internal or external pressure or requirements for improved sustainability outcomes. These include:</p> <ul style="list-style-type: none"> • a crisis related to current sustainability performance • regulatory requirements • demands from customers • community pressure • organisation commitment to improve sustainability • other demand for change on the organisation
Sustainability problems	<p>Sustainability problems may include:</p> <ul style="list-style-type: none"> • problems with procedures, process or equipment • problems with materials including material waste and disposal of waste materials • problems with energy consumption • problems with resource use including water

	<ul style="list-style-type: none">• problems with culture or employee skills and knowledge• problems with design or specification Problems should be amenable to change and not require detailed technical analysis before action
Process	Process includes: <ul style="list-style-type: none">• all parts of the value chain, including office and logistics, but for the purposes of this unit, is restricted to those parts of the value chain where changes can be made
Change stakeholders	Change stakeholders include: <ul style="list-style-type: none">• the personnel needed to identify, approve and implement sustainability improvements

Unit Sector(s)

Sustainability

Custom Content Section

Not applicable.