

Embedding Energy Management (EEM)

**Guideline mapping to MSS11 Sustainability Training Package units of competency**

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# About the mapping

This mapping looks at the alignment between the Embedding Energy Management (EEM) program and units of competency from the MSS11 Sustainability Training Package.

The mapping focuses on the following questions:

* Do the modules in the EEM program map to units of competency in the MSS11 Sustainability Training Package?
* If a learner completed a module would that satisfy any of the requirements of a unit of competency?
* Can the modules be used as learning resources for units of competency?

The mapping is intended as guidance only. It can assist Registered Training Organisations (RTOs) to do their own detailed mapping which will take into account their learners’ needs and backgrounds and delivery and assessment methods. See developing a training and assessment strategy (<http://sustainabilityskills.org/mss11/developing-customised-program/training-assessment-strategy/>)

The RTO may find other units of competency that have some alignment to the EEM modules in a particular context which reflects, for example:

* The range of job roles and levels of responsibility in the Site Leadership Team (SLT)
* Packaging electives to meet site or sector requirements
* Additional skills that are applied in progressing the energy plans and/or implementing improvements
* How the energy plans fit with broader sustainability focus of the business e.g other environmental issues and social sustainability.

# Overview of mapping

There are clear synergies and some overlap between the EEM program and units of competency in MSS11 Sustainability Training Package. This results in some alignment (mapping) of the program modules to several units of competency in MSS11 Sustainability Training Package.

However, there are differences in the approach, intent and content so the alignment is partial.

The EMM program is designed for the management/leadership team in a business. It helps them to develop a strategic response to the challenges of energy management and resource efficiency. The program covers team processes for planning how to embed energy efficiency into management systems and business planning, and for identifying energy opportunities.

In MSS11 Sustainability Training Package, the most relevant qualification is the MSS70111 Vocational Graduate Certificate in Sustainable Operations. The most relevant Skills Set is MSSSS00006 Reduce sustainability risk.

These comprise units of competency that target managers with strategic responsibility for sustainability. This is broader than energy efficiency but for most businesses energy efficiency will be a significant sustainability issue.

The units also require the application of specific skills and knowledge to identifying sustainability improvements. For example, root cause analysis might be required. They may also require implementation of the improvements.

## Key points

* The mapping was done based on the stated learning outcomes of the EEM program modules.
* Additional activities will logically flow on from the program, for example, in implementing the improvements; these have not been included in the mapping.
* The EEM program is aimed at senior managers to enable them to develop a strategic response to the challenges of energy management and resource efficiency. This places the program at ‘higher level’ in the Australian Qualifications Framework (AQF); at AQF 5 or above.
* In all cases the mapping shows partial alignment, i.e. completing a module will not meet the all of the requirements for a unit of competency.
* The EEM modules and tools can be used as resources to support the delivery and assessment of some MSS11 Sustainability Training Package units of competency.
* Completing the module should provide evidence that can be used **along with other evidence** to meet the rules of evidence for assessment for the relevant unit of competency.

# Summary of guideline mapping

The following table is a mapping of modules to units of competency.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MSS017001A Analyse and determine organisational risk areas in sustainability**  | **MSS017004A Lead sustainable strategy deployment**  | **MSS017003A Identify and respond to external sustainability factors for an organisation** | **MSAENV672B Develop workplace policy and procedures for sustainability**  |
| **Module 1: Energy and business planning** | partial | partial | partial | partial |
| **Module 2: Carbon inventory and supply chain impacts** | partial | partial | does not map | partial |
| **Module 3: Energy procurement** | does not map | does not map | does not map | does not map |
| **Module 4: Energy efficiency opportunities** | partial | partial | partial | partial |
| **Module 5: Energy management systems** | does not map | partial | partial | partial |

# Mapping tables

The following tables show where activities in the EEM modules (as per the module learning outcomes) might generate evidence that is relevant to the unit of competency (Element level).

**Mapping of Module 1 Energy and business planning to MSS11 Sustainability Training Package units of competency**

‘How to develop or maintain an energy management plan that reflects your sites strategic response to global trends in the industry.’

| **Learning outcome** | **Unit of competency** | **Element** |
| --- | --- | --- |
| Present the relationship between global trends in energy and carbon reporting, including the regulatory environment; current business plans; and the links to their high-level resource use baseline so that initial ideas on the strategic intent for resource management can be captured. | MSAENV672B  | 1. Develop workplace sustainability policy (1.1 Define scope of sustainability policy) |
| MSS017001A  | 1. Analyse interactions with organisation’s environment |
| MSS017003A  | 1. Monitor external environment for sustainability related factors |
| MSS017004A | 1. Develop sustainability strategy |
| Communicate business drivers and engage site operations and management to assess impacts and progress high-level plans to manage these impacts, arranging suitable sustainability audits where required (e.g. energy, carbon and lifecycle analyses). | MSAENV672B  | 2. Communicate the policy |
| MSS017001A  | 2. Determine the significance of each impact |
| MSS017003A  | 2. Develop alternative responses to external factors3. Communicate with relevant stakeholders |
| MSS017004A | 1. Develop sustainability strategy |
| Facilitate a shared understanding amongst the Site Leadership Team (SLT) of the business drivers that underpin their response to these trends and assess the level of maturity of the site to progress their plans applying widely used sustainability models.  | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 4. Communicate with relevant stakeholders |
| MSS017003A  | 5. Communicate required responses as appropriate |
| MSS017004A | - |
| Present high-level energy and carbon performance data and scope the resource investigations/assessments that are necessary to support their strategic response to these trends. ‘Arrange for sustainability (energy and carbon) related audits, if required’.  | MSAENV672B  | - |
| MSS017001A  | 4. Communicate with relevant stakeholders |
| MSS017003A  | 3. Communicate with relevant stakeholders |
| MSS017004A | 5. Communicate as appropriate |
| Develop appropriate actions to progress energy plans and implementation of agreed actions. | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 3. Develop an appropriate response for each interaction |
| MSS017003A  | 2. Develop alternative responses to external factors 4. Prepare response for factor or factors |
| MSS017004A | 2. Examine proposals for sustainability improvement |
| Monitor planning outcomes using regular meetings at site. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | - |
| MSS017004A | 4. Lead periodic review of sustainability improvements |

**Mapping of Module 2: Carbon inventory and supply chain impacts to MSS11 Sustainability Training Package units of competency**

‘How to use and maintain your carbon inventory to inform business planning and engage suppliers and customers about impacts.’

| **Learning outcome** | **Unit of competency** | **Performance criteria** |
| --- | --- | --- |
| Inform business planning decisions using detailed carbon inventories and reports. | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 3. Develop an appropriate response for each interaction |
| MSS017003A  | - |
| MSS017004A | 2. Examine proposals for sustainability improvement  |
| Communicate the sites carbon inventory and facilitate an analysis of the risks and opportunities associated with the inventory consistent with their strategic intent for resource management.  | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 2. Determine the significance of each impact4. Communicate with relevant stakeholders |
| MSS017003A  | - |
| MSS017004A | 5. Communicate as appropriate |
| Develop carbon initiatives and action plans to engage suppliers and customers to manage the identified risks and opportunities so that carbon footprints support business goals, including green credentials, product development and corporate responsibility activities. | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 3. Develop an appropriate response for each interaction |
| MSS017003A  | - |
| MSS017004A | 2. Examine proposals for sustainability improvement |
| Facilitate implementation of carbon planning outcomes using suitable engagement tactics. | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 4. Communicate with relevant stakeholders |
| MSS017003A  | - |
| MSS017004A | 3. Facilitate implementation of selected proposals |
| Monitor and investigate progress of plans using regular management, project and improvement meetings. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | - |
| MSS017004A | 4. Lead periodic review of sustainability improvements |

**Mapping of Module 4: Energy efficiency opportunities to MSS11 Sustainability Training Package units of competency**

‘How to get resource efficiency opportunities implemented in alignment with the strategic intent of your sustainability plans.’

| **Learning outcome** | **Unit of competency** | **Performance criteria** |
| --- | --- | --- |
| Present a baseline, including targets, business and production plans, and sustainability audit outcomes, where available in a manner that informs energy efficiency opportunities.  | MSAENV672B  | - |
| MSS017001A  | 4. Communicate with relevant stakeholders |
| MSS017003A  | 3. Communicate with relevant stakeholders |
| MSS017004A | 1. Develop sustainability strategy |
| Facilitate ideas on energy efficiency.  | MSAENV672B  | 3. Implement the policy |
| MSS017001A  |  |
| MSS017003A  | 2. Develop alternative responses to external factors |
| MSS017004A |  |
| Use and refine business case practices to a standard that will attract funding, where required, to meet financial hurdles. | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | - |
| MSS017003A  | 4. Prepare response for factor or factors |
| MSS017004A | - |
| Facilitate opportunity/project evaluation workshop using audit outcomes, where appropriate, so that the SLT can prioritise and plan implementation sympathetic to the budget cycle. | MSAENV672B  | 3. Implement the policy |
| MSS017001A  | 3. Develop an appropriate response for each interaction |
| MSS017003A  | 3. Communicate with relevant stakeholders |
| MSS017004A | 2. Examine proposals for sustainability improvement |
| Facilitate project development and implementation using project briefs and master opportunity workbook to engage staff, monitor and report progress of energy cost saving opportunities. | MSAENV672B  | 4. Review implementation policy |
| MSS017001A  | 3. Develop an appropriate response for each interaction |
| MSS017003A  | 3. Communicate with relevant stakeholders |
| MSS017004A | 3. Facilitate implementation of selected proposals |
| Recognise the need for measurement and verification (M&V) and monitor the application of appropriate protocols with site engineering team, contractors/consultants. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | - |
| MSS017004A | 3. Facilitate implementation of selected proposals |
| Report outcomes to SLT consistent with regulatory requirements, where applicable. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | 5. Communicate required responses as appropriate |
| MSS017003A  | 5. Communicate required responses as appropriate |
| MSS017004A | 5. Communicate as appropriate |

**Mapping of Module 5: Energy management systems to MSS11 Sustainability Training Package units of competency**

‘How to embed energy into your management system so that your system supports the strategic intent of your energy and sustainability plans, including both technical and behavioural resource efficiency opportunities.’

| **Learning Outcome** | **Unit of competency** | **Performance criteria** |
| --- | --- | --- |
| Communicate the need for a systems approach to energy efficiency to progress the strategic intent of the energy plans. | MSAENV672B  | 2. Communicate the policy |
| MSS017001A  | - |
| MSS017003A  | 3. Communicate with relevant stakeholders |
| MSS017004A | 5. Communicate as appropriate |
| Diagnose, communicate and investigate gaps in management systems with engaged stakeholders. Select and administer a suitable energy systems diagnostic consistent with the strategic intent of your site energy plans. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | 3. Communicate with relevant stakeholders |
| MSS017004A | 4. Lead periodic review of sustainability improvements |
| Design improvements to management systems necessary to systematically identify new opportunities and sustain existing energy efficiency opportunities (technology and behavioural) in collaboration with the SLT. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | - |
| MSS017004A | 4. Lead periodic review of sustainability improvements |
| Develop a project brief to make improvements or facilitate others to make changes to management and monitoring systems consistent with individuals delegated authority.  | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | 5. Communicate required responses as appropriate. |
| MSS017004A | 4. Lead periodic review of sustainability improvements |
| Orientate system users to the required changes in their management systems using a project brief.  | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | - |
| MSS017004A | 5. Communicate as appropriate |
| Monitor and investigate and report outcomes of enhancements to energy management systems using regular management forums. | MSAENV672B  | 4. Review policy implementation |
| MSS017001A  | - |
| MSS017003A  | - |
| MSS017004A | 4. Lead periodic review of sustainability improvements5. Communicate as appropriate |