# 2018-19 Case for Change

## Sustainability Industry Reference Committee (IRC)

## MSS Sustainability Training Package

**Contact details:** Mr Peter Nemtsas, IRC Chair

**Date submitted to Department of Education and Training:** May 2018

### Energy Management

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| Description: | This project will review and update current training package components in the areas of energy management, including energy procurement, to ensure coverage of the skills and knowledge needed by individuals with responsibilities for improving energy performance and/or developing/implementing strategic approaches to energy management. |
| Rationale: | Energy price shock has been identified as a leading issue and risk for both enterprises and the residential market, and was identified by CEOs in Australia as the biggest risk to doing business in 2017.<br><br>Whilst many larger organisations often have access to the internal or external expertise needed to develop a strategic approach to energy management, this is not a viable option for all. Demand for courses being offered outside of the VET system (such as those run by the NSW Government Office of Environment and Heritage) demonstrates a growing interest in and demand for skills and strategies for managing energy costs in a way that requires little capital investment. This includes skills for tasks such as:<br><br>• Understanding energy consumption<br>• Interpreting energy data<br>• Identifying potential areas of energy savings<br>• Developing and implementing energy management systems, policies and plans<br>• Engaging decision makers and other organisation stakeholders<br>• Negotiating energy supply contracts<br>• Identifying and procuring alternative energy options. |

## Energy Management

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| Rationale: | Demand for these skills is coming from representatives of a wide range of industries and occupations, from electricians and energy consultants, through to those with responsibitities for managing facilities, environment and sustainability, financial and other aspects of business operations.<br><br>A lack of capability and skills within organisations for managing and procuring energy in an efficient and sustainable way poses significant risk for the ongoing viability of Australian businesses and is increasing the risk of whole industry sectors moving offshore. This makes the development of new training products to address these skills a high priority.<br><br>The training products to be developed and updated through this project will be relevant to a wide range of occupations with responsibilities for management or procurement of energy within any industry that is being impacted by rising energy costs. The cross-sectoral nature of the MSS Sustainability Training Package makes it an ideal home for these products. |
| Ministers' Priorities Addressed: | The case for change addresses the following Ministers' Priorities:<br><br>**Obsolete qualifications removed from the system**<br><br>Sustainable Operation qualifications have a history of low enrolments. This project is likely to result in new units of competency and a new stream within these existing qualifications, which will increase their relevance to industry and thereby likely increase their usage.<br><br>**More information about industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed choices**<br><br>Updates to the Companion Volume after this work will provide training providers with clarity on vocational outcomes and pathways and discussions with industry will provide the opportunity to promote these vocational pathways.<br><br>**The training system better supports individuals to move more easily between related occupations**<br><br>The training products to be developed through this project will be relevant to a very wide range of occupations and industries, supporting tranferability of skills and mobility of skilled workers both within and across industry sectors.<br><br>**Improved efficiency of the training system through units that can be owned and used by multiple industry sectors**<br><br>New or updated units of competency may be valuable additions to the 'elective bank' for use in other training packages such as Electrotechnology (for use by electricians) and Business Services (for use in business management).<br><br>**Foster greater recognition of skill sets**<br><br>A number of skill sets will be revised as part of this project, increasing their relevance and visibility to industry and consumers. |

## Energy Management

Consultation Plan:

IBSA Manufacturing Training Development Projects follow the Training Package Development and Endorsement Process Policy and use a five-phase methodology. An IBSA Industry Manager will coordinate the project on behalf of the IRC.

**Phase 1 – Initial research and analysis**

Establishment of a Technical Advisory Committee (TAC) to validate the project scope and plan, contribute to further industry research and assist in determining industry needs and job role functional analysis.

The IRC will appoint the Technical Advisory Committee/s to inform this work. The TAC will have current skills and knowledge of the broad range of job roles covered by this project and also include industry and member associations, licensing and regulatory authorities.

Proposed membership will include representatives from:

- Energy Efficiency Council
- Sustainable Business Australia
- One or more organisations who have successfully implemented energy management initiatives
- One or more energy management practitioners/subject matter experts
- Specialist training organisation in energy management.

**Phase 2 – Draft 1 and public consultation**

Develop first draft of training package components for feedback from the TAC and then the broader industry and RTOs.

**Phase 3 – Draft 2 and public consultation**

Respond to feedback and develop second draft of training package components. Feedback to be sought from the broader industry and RTOs.

**Phase 4 – Approval process**

Adjust training package components in response to further feedback and seek approval from respective committees, namely the TAC and IRC and endorsement from state training authorities.

**Phase 5 – Submission to Department**

Submit to the Department of Education and Training for AISC approval.

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Consultation Plan:

**Consultation Plan**

IBSA will create a project web page to provide project updates, gather feedback from stakeholders and validate training package components.

Proposed consultations include:

- Government bodies responsible for energy regulation, energy management policy and programs
- Accredited organisations providing energy management advice
- Industry representatives and employers to identify the industry and job requirements and trends and work opportunities including:
  - Energy Efficiency Council
  - Sustainable Business Australia
  - Organisations who have successfully implemented energy management initiatives
  - Energy management practioners/subject matter experts
  - Specialist training organisations in energy management
- RTOs with the qualifications on scope and recent or current students if accessible to gain feedback on the actual qualifications and employment outcome
- Other Industry Reference Committees with relevant energy efficiency and management units under their remit
- State Training Authorities to ensure all jurisdictions are engaged.

## Scope of Project

Timing

**Estimated Project Duration:** 12 months

**Anticipated Start Date:** September 2018

**Anticipated Completion Date:**
Case for Endorsement to be submitted to the Department September 2019

Training Package

**Training Package to be developed/revised:**

MSS Sustainability Training Package

## Energy Management

Qualifications

A total of **3-4 qualification**s to be revised/developed as part of this project.

**3 existing** qualifications to be revised, with the potential for an Energy Management stream to be incorporated into one of more of these:

- MSS40116 Certificate IV in Sustainable Operations
- MSS50116 Diploma of Sustainable Operations
- MSS80116 Graduate Certificate in Sustainable Operations.

In addition to the review of existing qualifications, a review will be undertaken to determine the feasibility and need for an additional qualification in Energy Management. However, preliminary investigations have identified 2 qualifications from the UEE Electrotechnology Training Package, 1 qualification from the CPP Property Services Training Package and 2 accredited courses as listed below. These will be reviewed for relevance.

- UEE43111 Certificate IV in Energy Efficiency and Assessment
- UEE41011 Certificate IV in Energy Management and Control
- CPP51012 Diploma of Residential Building Energy Assessment
- 22453VIC Course in New Energy Technology Systems
- 22311VIC Course in Retrofitting for Energy and Water Efficiency.

## Energy Management

Skill Sets

A total of **6 Skill Sets** be developed/updated as part of this project.

**1 new** skill set to be developed:

- Energy Management.

**5 existing** skill sets to be updated:

- SS1 Audit energy usage for a work area
- SS2 Determine energy usage
- SS3 Improve energy usage for a process or organisation
- SS4 Improve energy usage for a work area
- SS5 Recommend energy improvements.

The following 8 skill sets will also be reviewed as part of this project for relevance:

- Business Services Training Package
  - BSBSS00060 Energy Efficiency in Business Skill Set.
- Electrotechnology Training Package
  - UEESS00102 Sustainable - Energy assessment of commercial facilities
  - UEESS00103 Sustainable - Energy Assessment of industrial properties and enterprises
  - UEESS00104 Sustainable - Energy assessment of residential, office and retail premises
  - UEESS00105 Sustainable - Energy Efficiency Auditor
  - UEESS00106 Sustainable - Energy Efficiency Systems Designer
  - UEESS00107 Sustainable - Energy Efficiency Systems Developer
  - UEESS00108 Sustainable - Energy Efficiency Systems Integration Sustainable
  - UEESS00109 Sustainable - Identify Energy Efficiency Strategies.

## Energy Management

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| Units of Competency | A total of **25 units of competency** to be developed/revised as part of this project.<br>Potentially **3 new units** of competency to be developed related to the following areas:<br>• analysing energy consumption and interpreting energy data<br>• negotiating energy procurement<br>• estimating future energy use.<br>**22 existing** units of competency to be revised:<br>• MSS014001 Improve sustainability through readily implementable change<br>• MSS014002 Evaluate sustainability impact of a work or process area<br>• MSS014003 Optimise sustainability of a process or plant area<br>• MSS014004 Develop team strategies for more sustainable use of resources<br>• MSS014005 Apply proactive maintenance strategies to sustainability<br>• MSS014006 Contribute to sustainability related audits<br>• MSS015002 Develop strategies for more sustainable use of resources<br>• MSS015003 Analyse product lifecycle for sustainability<br>• MSS015005 Develop required sustainability reports<br>• MSS015008 Develop strategic sustainability plans<br>• MSS015011 Conduct a sustainability energy audit<br>• MSS015015 Evaluate sustainability impact of a process<br>• MSS015017 Develop regulated sustainability reports<br>• MSS015018 Inform and educate organisation and community representatives on sustainability issues<br>• MSS017002 Determine process loss through mass or energy balancing<br>• MSS024001 Work and communicate effectively as an environmental technician<br>• MSS027003 Provide environmental advice to clients<br>• MSS027005 Contribute to improving environmental performance<br>• MSS405070 Develop sustainable energy practices<br>• MSS407001 Prepare for and implement change<br>• MSS407004 Facilitate improvements in the internal value stream<br>• MSS407013 Review continuous improvement processes. |

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| Units of Competency | A number of units of competency were also identified across the national training system in relation to energy efficiency and management. These include units from:<br>• AMP Australian Meat Processing Training Package<br>• BSB Business Services Training Package<br>• CPC Construction, Plumbing and Services Training Package<br>• CPP Property Services Training Package<br>• FWP Forest and Wood Products Training Package<br>• MEM Metals and Engineering Training Package<br>• UEE Electrotechnology Training Package<br>• UEP Electricity Supply Industry - Generation Sector Training Package<br>• UET Transmission, Distribution and Rail Sector Training Package.<br>These components will also be considered as part of this project to confirm if they meet industry needs and minimise duplication of units across the national training system. |