



Australian Government

UEERE0053 Assess energy loads and uses for energy efficiency in industrial properties and enterprises

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

This unit replaces and is not equivalent to UEERE0004 Assess energy loads and uses for energy efficiency in industrial properties and enterprises. Modifications include:

- Update to application
- Prerequisite changed
- Element titles amended
- Performance criteria removed and added
- Range of conditions updated
- Updates to performance and knowledge evidence requirements and CVIG content developed.

Application

This unit involves the skills and knowledge required to assess energy loads, undertake energy audits of industrial properties and enterprises, evaluate the energy efficiency of the facilities and make recommendations on design implementations.

It includes working safely, applying knowledge of industrial electrical installations and components and their operating parameters, gathering and analysing data, applying problem-solving techniques, and developing and documenting engineering solutions.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

UEERE0068 Develop strategies to address sustainability issues for electrical installations

Competency Field

Renewable Energy

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare to assess energy efficiency of industrial properties and enterprises

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) requirements are identified and applied
- 1.2** Organisational processes and procedures relevant to energy efficiency assessment are identified, interpreted, and applied
- 1.3** Extent of the energy assessment is determined from analysis of facilities, orientation and floor plans, building structure plans, energy accounts and situation reports in consultation with relevant person/s and in accordance with organisational procedures
- 1.4** Energy assessment activities/audits are planned to meet scheduled timelines in consultation with others involved in the work
- 1.5** Strategies are determined to ensure energy efficient solutions are developed and implemented in accordance with industry standards and organisational procedures

2 Assess and evaluate energy efficiency of industrial properties and enterprises

- 2.1** Information on energy use, any onsite energy generation and energy costs are gathered and recorded
- 2.2** Main sources of energy use are identified, measured and recorded
- 2.3** Information about activities undertaken at facility, and their impact on energy efficiency, is gathered and recorded
- 2.4** Industry/government initiatives/programs to support energy efficiency are identified and evaluated
- 2.5** Energy loads are considered when developing energy efficient strategies to address and minimise energy use
- 2.6** Parameters, specifications and performance requirements in relation to energy use are set in accordance with

		organisational procedures
	2.7	Approaches/strategies to resolving and minimising energy use are analysed to provide the most effective solutions in accordance with organisational procedures
	2.8	Energy efficiency, cost savings and emission reductions from implementing energy efficiency measures are estimated and documented
3 Document energy efficiency assessment of industrial properties and enterprises	3.1	Proposed solutions/strategies to minimise energy use are tested to determine their effectiveness and modified, as required, in accordance with organisational procedures
	3.2	Adopted solutions are documented in accordance with organisational procedures, including instructions for implementation that incorporate the risk control measures to be followed
	3.3	Authorised person/s required to implement solutions are coordinated in accordance with regulatory requirements and organisational procedures
	3.4	Justification for strategies used to minimise energy use is documented for inclusion in work/project development records in accordance with professional standards and organisational procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Carrying out energy assessments and documenting energy efficiency strategies must include at least the following:

- two manufacturing/industrial properties/enterprises.

Unit Mapping Information

This unit replaces and is not equivalent to UEERE0004 Assess energy loads and uses for energy efficiency in industrial properties and enterprises.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>