



Australian Government

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

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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.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two occasions and include:

- applying relevant organisational procedures and practices, work health and safety (WHS)/occupational health and safety (OHS) requirements, including using risk control measures
- performing energy use assessments and identifying efficiency improvements for industrial properties and enterprises in accordance with the range of conditions
- documenting and presenting final recommendations.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of. Additional advice and definitions for some items is provided in the UEE Training Package Companion Volume Implementation Guide (CVIG).

- relevant WHS/OHS legislated requirements and relevant organisational procedures and practices, job safety assessments or risk control processes and types of personal protective equipment (PPE) to be used when conducting on-site assessments of industrial properties and enterprises energy use
- alternative energy production and storage technologies applicable to industrial properties and enterprises

- energy ratings and power consumption of appliances and equipment and how they are calculated
- energy types and units of measurement
- key requirements of relevant codes, standards, regulations and government incentive programs for industrial property and enterprise energy efficiency
- major systems and other sources of industrial property and enterprise energy use including:
 - cooking
 - refrigeration
 - washing and drying
 - home entertainment and home office equipment
 - heating, cooling and ventilation
 - internal and external appliances
 - swimming pools and spas
 - water heating
 - water pumps
 - building management systems
 - use of renewables and energy storage
 - electric vehicles
 - process heat/water/steam
 - compressed air
 - power factor correction
 - peak demand charge
 - manufacturing equipment
 - variable speed drives
 - industrial/commercial lighting
 - industrial/commercial ventilation
- methods for interpreting energy bills including: actual and estimated bills, plans and tariffs
- strategies for improving industrial property and enterprise energy efficiency including impact of building design, proximity and orientation on heating/cooling energy use, upgrade options and behavioural changes
- trends in energy use and emissions
- water supply, use, auditing services and design
- greenhouse gas emissions, ecological impacts and resource use
- energy management, legislation and regulation relevant to industrial properties and enterprises
- energy auditing and practice
- energy management
- power and energy data monitoring and recording
- lighting services and efficient design
- thermal performance and climate control
- food storage and preparation services and efficient design

- water heating services and efficient design
- entertainment and administration services and efficient design
- cleaning services and efficient design
- pumping systems (and pools) and efficient design
- smart metering solutions
- renewable energy (solar PV/energy storage)
- types and uses of energy measuring tools.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

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