

# **UEENEEK114A Promote sustainable energy practices in the community**

Release: 1



# **UEENEEK114A Promote sustainable energy practices in the community**

# **Modification History**

Not applicable.

# **Unit Descriptor**

**Unit Descriptor** 

1) Scope:

1.1) Descriptor

This unit covers the promotion of recognised, safe, sustainable energy practices to others in the community.

# **Application of the Unit**

**Application of the Unit** 

This unit shall apply to persons entering work in electrotechnology and may be used in school-based vocational programs.

# **Licensing/Regulatory Information**

License to practice

3)

2)

The skills and knowledge described in this unit do not require a license to practice in the workplace. However, practice in this unit is subject to regulations directly related to occupational health and safety and contracts of training such as new apprenticeships.

Note:

1. Compliance with permits may be required in various jurisdictions and typically relates to the operation of plant, machinery and equipment such as elevating work platforms, powder operated fixing tools, power operated tools, vehicles, road signage and traffic control and lifting equipment. Permits may also be required for some work environments such as confined spaces, working aloft, near

Approved Page 2 of 11

# License to practice

3)

live electrical apparatus and site rehabilitation.

2. Compliance may be required in various jurisdictions relating to currency in First Aid, confined space, lifting, risk safety measures etc

# **Pre-Requisites**

**Prerequisite Unit(s)** 

Competencies 4.1)

There are no prerequisite competencies for this unit.

# Literacy and numeracy skills

4.2)

4)

Participants are best equipped to achieve competency in this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading 3 Writing 3 Numeracy 3

# **Employability Skills Information**

# **Employability Skills** 5)

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

Approved Page 3 of 11

# **Elements and Performance Criteria Pre-Content**

6) Elements describe the essential outcomes of a competency standard unit

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the Evidence Guide.

# **Elements and Performance Criteria**

### **ELEMENT**

### PERFORMANCE CRITERIA

- 1 Plan and prepare to promote sustainable energy practice
- 1.1 Activities are planned and prepared to ensure OHS policies and procedures are followed with the work appropriately sequenced in accordance with requirements
- 1.2 Appropriate personnel are consulted to ensure the work is coordinated effectively with others involved
- 1.3 Materials are obtained and checked in accordance with established procedures and to comply with requirements
- 1.4 Location in which activities are to be undertaken is determined from requirements
- 1.5 Materials necessary to complete the work are obtained in accordance with established procedures and checked against job requirements
- 2 Promote sustainable energy practice
- 2.1 OHS policies and procedures for undertaking administrative functions are followed
- 2.2 Activities are undertaken in accordance with requirements without damage or distortion to the surrounding environment or services
- 2.3 Unplanned events or conditions are responded to in accordance with established procedures
- 2.4 Approval is obtained in accordance with established procedures from appropriate personnel before any contingencies are implemented

Approved Page 4 of 11

# 2.5 Ongoing checks of the quality of the work are undertaken in accordance with established procedures 3 Complete the promotion of sustainable energy 3.1 Documentation/reports are completed to ensure detailed promotional activities requirements are met 3.2 Completion is notified in accordance with

established procedure

# Required Skills and Knowledge

# REQUIRED SKILLS AND KNOWLEDGE

8) This describes the essential skills and knowledge and their level, required for this unit.

Evidence must show that knowledge has been acquired of safe working practices and promoting sustainable energy practices in the community.

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies.

# KS01-EK114A Greenhouse reduction strategies

Evidence shall show an understanding of greenhouse gas reduction strategies to an extent indicated by the following aspects:

- T1 Greenhouse gas emissions profile encompassing:
  - goals and principles of the National Greenhouse Strategy
  - what a greenhouse gas inventory is, why it is required, and the sectors to which it applies
  - uses to which the National Greenhouse Gas Inventory can be applied.

T2 Understanding and communicating climate change and its impacts encompassing:

- the possible impact of climate change in Australia.
- techniques for improving the understanding of climate change
- techniques for communicating to and educating the general public on greenhouse gas induced climate change.

Approved Page 5 of 11

# REQUIRED SKILLS AND KNOWLEDGE

- T3 Partnerships for greenhouse action encompassing:
  - actions achievable by each level of government to implement the NGS.
  - methods by which the community activity can be engaged in the reduction of greenhouse gas emissions.
  - initiatives that can be undertaken by the private sector to reduce greenhouse gas emissions.
  - advantages of international partnerships.
  - · emissions trading system.

# T4 Efficient and sustainable energy use and supply encompassing:

- techniques for reducing the greenhouse intensity of energy supply.
- types of renewable energy sources suitable for use in Australia.
- methods and technique for improving end-use efficiency.

# T5 Efficient transport and sustainable urban planning encompassing:

- how integrating land use and transport planning can assist the greenhouse problem.
- how each of the following can be used to mitigate greenhouse gas; travel demand and traffic management strategies; encouraging greater use of public transport, walking and cycling; freight and logistics systems; improving vehicle fuel efficiency and fuel technologies;

# T6 Greenhouse sinks and sustainable land management encompassing:

- how enhancing greenhouse sinks and encouraging sustainable forestry and vegetation management can complement the AGS.
- how greenhouse gas emissions are obtained from agricultural production and describe techniques to mitigate the emissions.

# T7 Models of greenhouse best practice in industrial processes and waste management encompassing:

- types and methods of reducing greenhouse gas emissions from industry.
- methods of reducing methane emissions from waste treatment and disposal.

Approved Page 6 of 11

### REQUIRED SKILLS AND KNOWLEDGE

- T8 Adaptation to climate change encompassing:
  - salient points in each of the key sectors that require analysis and the strategies required in the need for adaptation to climate change

# **Evidence Guide**

### **EVIDENCE GUIDE**

9) This provides essential advice for assessment of the unit and must be read in conjunction with the performance criteria and the range statement of the unit and the Training Package Assessment Guidelines.

The Evidence Guide forms an integral part of this unit. It must be used in conjunction with all parts of this unit and performed in accordance with the Assessment Guidelines of this Training Package.

# Overview of Assessment

9.1)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the industry-preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. In some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accordance with industry and regulatory policy.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety issues inherent in working with electricity, electrical equipment, gas or any other hazardous substance/material present a challenge for those determining competence. Sources of evidence need to be 'rich' in nature to

Approved Page 7 of 11

minimise error in judgment.

Activities associated with normal everyday work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practised. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included for Assessors in the Assessment Guidelines of this Training Package.

Critical aspects of evidence required to demonstrate competency in this unit 9.2)

Before the critical aspects of evidence are considered all prerequisites must be met.

Evidence for competence in this unit must be considered holistically. Each element and associated performance criteria must be demonstrated on at least two occasions in accordance with the 'Assessment Guidelines – UEE11'. Evidence must also comprise:

- A representative body of work performance demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this must incorporate evidence that shows a candidate is able to:
  - Implement Occupational Health and Safety workplace procedures and practices including the use of risk control measures as specified in the performance criteria and range statement
  - Apply sustainable energy principles and practices as specified in the performance criteria and range statement
  - Demonstrate an understanding of the essential knowledge and associated skills as described in this unit. It may be required by some jurisdictions that RTOs provide a percentile graded result for the purpose of regulatory or licensing requirements.
  - Demonstrate an appropriate level of skills enabling employment
  - Conduct work observing the relevant Anti Discrimination legislation, regulations, polices and workplace procedures

Approved Page 8 of 11

- Demonstrated consistent performance across a representative range of contexts from the prescribed items below:
  - Promote sustainable energy practices in the community as described in 8) and including:
- A Applying sustainable energy practice in the community
- B Dealing with unplanned events by drawing on essential knowledge and skills to provide appropriate solutions incorporated in a holistic assessment with the above listed items

### Note:

Successful completion of relevant vendor training may be used to contribute to evidence on which competency is deemed. In these cases the alignment of outcomes of vendor training with performance criteria and critical aspects of evidence must be clearly identified

# Context of and specific resources for assessment

9.3)

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

- OHS policy and work procedures and instructions.
- Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed by this unit.

These should be part of the formal learning/assessment environment.

### Note:

Where simulation is considered a suitable strategy for assessment, conditions must be authentic and as far as possible reproduce and replicate the workplace and be consistent with the approved industry simulation policy.

The resources used for assessment should reflect current industry practices in relation to promoting sustainable energy practices in the community.

Approved Page 9 of 11

# Method of assessment

# 9.4)

This unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.

### Note:

Competent performance with inherent safe working practices is expected in the Industry to which this unit applies. This requires assessment in a structured environment which is intended primarily for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the essential knowledge and skills described in this unit.

# Concurrent assessment and relationship with other units

9.5)

There are no concurrent assessment recommendations for this unit.

Approved Page 10 of 11

# **Range Statement**

# RANGE STATEMENT

10) This relates to the unit as a whole providing the range of contexts and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

This unit must be demonstrated in relation to promoting sustainable energy practice in the community in any of the following disciplines:

- Appliances
- Business equipment
- Computers
- Data Communications
- Electrical
- Electrical Machines
- Electronics
- Fire protection
- Instrumentation
- Refrigeration and Air Conditioning

11)

- · Renewable/sustainable energy
- Security technology

Generic terms used throughout this Vocational Standard shall be regarded as part of the Range Statement in which competency is demonstrated. The definition of these and other terms that apply are given in Volume 2, Part 2.1.

# **Unit Sector(s)**

Not applicable.

# **Competency Field**

**Competency Field** 

Renewable and Sustainable Energy

Approved Page 11 of 11