

1. Module details**Module name****Provide basic sustainable energy solutions for energy reduction in domestic premises– Work performance****Module duration**

The time taken to complete this module will vary depending on the opportunities in the work place for learner's to develop their skills and the method used to obtain evidence of competent performance. Where evidence is obtained through formalised assessment event(s) under simulated conditions, it would normally take a learner a minimum of 40 hours to successfully complete the module.

Module code**NUEWP061****Discipline code****2. Module purpose**

This module provides methods and criteria for gathering evidence that shows a person has achieved the levels of performance specified in Unit NES 061 “Provide basic sustainable energy solutions for energy reduction in domestic premises”.

3. Prerequisites

This module shall be undertaken in conjunction with modules that provide the knowledge and skills underpinning performance.

4. Relationship to competency standards

This module supports Unit UTE NES 061A “Provide basic sustainable energy solutions for energy reduction in domestic premises” of the Electrotechnology Competency Standards included in the National Electrotechnology Training Package UTE-99.

5. Assessment strategy**Assessment methods**

Evidence of competent performance may be gathered from real work activities, which are recorded by the use of work reports, logbooks, profiles, or portfolios. The learner's immediate supervisor shall confirm the accuracy of the evidence the learner presents in this way. The supervisor must be competent in the area.

Conditions of assessment

Evidence of competent performance can be gathered from the workplace or a simulated work environment. A simulated environment would necessarily include the necessary range of equipment, systems and resources similar to those encountered in a real workplace. As well as the generic aspects of competency, assessment should take into account variations between particular industry sectors and different enterprises.

Assessment criteria

In judging work performance it is essential that evidence regarding the following aspects of competency is considered.

- Performance is independent under direct supervision and to **requirements** and occurs **on at least 2 occasions for each of the following elements**:
 - Prepare to monitor energy usage and provide basic solutions for energy reduction
 - Undertake monitoring of energy usage and provide basic solutions for energy reduction
 - Complete monitoring activities and provide and provide reports where necessary
- and in relation to a **representative range** of providing basic sustainable energy solutions for energy reduction in domestic premises that apply within the Sustainable and/or Renewable Energy sector of the Electrotechnology Industry. This includes but is not limited to: using reflective curtains to control heat; using natural or artificial shade to control sunlight; double glazing and reflective films; using solar water heating; making sure trees do not shade solar hot water collectors; checking for leakage in hot water system pressure relief valves and elsewhere in plumbing systems; replacing incandescent lamps with compact fluorescent lamps; insulating dwellings, offices and workplaces; preventing draughts; installing timers or sensors on lighting and climate control systems; installing self-closing doors to minimise heat/cooling loss; using natural gas for heating rather than oil or coal based fuels; using devices to reduce water usage; using sunlight to replace artificial light; ventilating roof cavities to reduce ceiling heating; installing renewable energy systems e.g. photovoltaics.

Providing basic sustainable energy solutions for energy reduction in domestic premises in the Sustainable and/or Renewable Energy sector across a *representative range* of apparatus and associated systems must be appropriately demonstrated on-the-job in real work activities or equivalent simulated environment. The remainder may be achieved by the combined effect of relevant off-the-job training and/or the skill transfer from prior satisfactory completion of other related development, work performance or units of competency.
- Applying **established procedures, techniques, procedures, information, and/or resources** relevant to performance.

Judgement should be made on evidence gathered from a number of events and over a period showing the development of competent work performance. It should also include any interdependent units of competency and all the specified underpinning knowledge and skills listed in the Underpinning Knowledge and Skills specification of the Unit of Competency NES 061.

Note: words shown in *italics* in this Workperformance Module have a specific definition and intended scope of application, eg. *requirements, representative range, etc.* Such is described in the Glossary of the National Electrotechnology Training Package and forms an integral part of this module.

Resource requirements

Resources should be sufficient for participants to carry out activities, from which evidence may be gathered, on an individual basis. This will include access to tools, equipment, resources, standards, and other equipment/documents that are necessary to perform the activities required.

Occupational health and safety requirements

A safe and healthy environment will be provided for participants and assessors as well as safety procedure with regard to assessment activity.