



**Australian Government**

# **AHCAGB515 Develop sustainable agricultural practices that utilise renewable energy and recycling systems**

**Release: 1**

## AHCAGB515 Develop sustainable agricultural practices that utilise renewable energy and recycling systems

### Modification History

| Release   | Comments                                                                                                                 |
|-----------|--------------------------------------------------------------------------------------------------------------------------|
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0. |

### Application

This unit of competency describes the skills and knowledge to develop planning strategies to address sustainability issues, using renewable energy and opportunities to recycle products, and reduce the impact of waste from the production system.

This unit applies to those who manage land-based businesses and are required to consult with external experts such as alternative energy consultants and suppliers of alternative energy equipment, planning authorities, and government departments who administer subsidies and provide advice.

The work involves applying sustainable renewable energy systems to rural, regional and local conditions. All work must be carried out to comply with workplace procedures, work health and safety legislation and codes, and sustainability practices.

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

### Pre-requisite Unit

Nil

### Unit Sector

Agribusiness (AGB)

### Elements and Performance Criteria

| Elements                                          | Performance Criteria                                                                                                                |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>  | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                              |
| 1. Identify opportunities to use renewable energy | 1.1 Identify areas of enterprise where renewable energy, recycling products or improving work practices could be utilised to reduce |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                  | <p>greenhouse gas emissions</p> <p>1.2 Identify available government subsidies for the implementation of strategies using renewable energy or recycling and potential cost savings to the business in the longer term</p> <p>1.3 Identify the specified standards of quality, licensing, regulatory requirements, government legislation and safety issues for the introduction of any renewable energy resources and recycled products</p> <p>1.4 Identify potential income generated by on selling energy excesses or recycled products</p> <p>1.5 Measure improvement outcomes from the introduction of renewable energy sources and recycling products in relation to achieving greater sustainability</p> <p>1.6 Conduct risk assessment for work health and safety hazards associated with renewable energy and recycling initiatives</p>  |
| 2. Develop strategies to use renewable energy    | <p>2.1 Develop strategies to reduce greenhouse gas emissions and use renewable energy resources, recycled products and improved work practices</p> <p>2.2 Estimate plant, material, labour and other associated costs in consultation with appropriate person or organisation</p> <p>2.3 Develop a budget for estimated plant, material, labour and other associated costs</p> <p>2.4 Develop work plan for the introduction of renewable energy resources and recycled products</p> <p>2.5 Investigate sources and availability of materials and human resources needed to complete work plan</p> <p>2.6 Develop risk management strategies including contingencies to maintain supply and deliver contract on time, and incorporate into the plan</p> <p>2.7 Develop work health and safety risk control measures and establish procedures</p> |
| 3. Implement strategies to use renewable energy  | <p>3.1 Implement and monitor the plan for renewable energy and recycling products to ensure on time supply of plant and materials</p> <p>3.2 Monitor the progress of strategies to reduce greenhouse gas emissions and recycling against schedule, quality requirements and budget</p> <p>3.3 Review plan against required inputs and rectify any anomalies to</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                   |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                 |
|                                                  | meet and supply contractual arrangements on time<br>3.4 Monitor work health and safety risk control measures and procedures and implement changes<br>3.5 Evaluate the improvement outcomes and document appropriate corrective actions |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.*

| Skill   | Description                                                                                                                                      |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading | <ul style="list-style-type: none"> <li>Access, interpret and analyse complex information about renewable energy systems and recycling</li> </ul> |

## Unit Mapping Information

| Code and title current version                                                                              | Code and title previous version                                                             | Comments                                                                                                                          | Equivalence status |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|
| AHCAGB515<br>Develop sustainable agricultural practices that utilise renewable energy and recycling systems | AHCAGB508<br>Improve agricultural sustainability using renewable energy and recycle systems | Title updated<br>Elements updated<br>Performance criteria clarified<br>Foundation skills added<br>Assessment requirements updated | Equivalent unit    |

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

## Assessment Requirements for AHCAGB515 Develop sustainable agricultural practices that utilise renewable energy and recycling systems

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### Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has developed sustainable agricultural practices that utilise renewable energy and recycling systems, including:

- identified key parts of the enterprise operation that may be converted to renewable energy sources, reducing greenhouse emissions and recycling opportunities using key principles of sustainability
- calculated the savings for at least one improvement
- implemented at least one improvement
- evaluated the improvement outcomes.

### Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the effect of greenhouse gas emissions on the environment
- key principles of sustainability associated with using of renewable energy and recycling systems
- legislation, regulatory and licensing requirements associated with renewable energy and recycling
- subsidies available for adopting renewable energy systems
- environmental and work health and safety risk management strategies.

### Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions

- resources, equipment and materials:
  - access to an agricultural production site
- specifications:
  - access to information about sustainable work practices in agriculture, renewable energy sources and options for recycling.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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