



Australian Government

FWPFRM5002 Source information on the contribution of forestry to carbon reduction strategies

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to source and disseminate information on the contribution of forestry to carbon reduction and forest carbon stock measurement and monitoring.

The unit applies to individuals who are involved in carbon reduction activities in the forestry industry.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Forest Resource Management (FRM)

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. Collate and disseminate information on forestry contribution to carbon reduction	1.1 Source information on role of forests in carbon cycle and impact of climate change on tree physiology and forest ecosystems 1.2 Research contribution of forests to climate change mitigation and how sustainable forestry practices support carbon reduction strategies,

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	including carbon sequestration and emissions trading schemes 1.3 Prepare and present information to professional and non-professional audiences on contribution of forestry to carbon reduction
2. Collate and disseminate information on techniques for estimating forest carbon stock	2.1 Source workplace policies and procedures and reference materials on estimating forest carbon stocks 2.2 Gather information on methods for measuring and monitoring forest carbon stocks 2.3 Research quality assurance and quality control procedures required to ensure reliability of measurements, data entry, data analysis and data archiving when conducting forest carbon inventory 2.4 Review processes involved in interpreting sampling data and estimating carbon stocks from collected data 2.5 Source information on processes involved in using growth models to predict biomass and carbon stocks and comparing predicted forest carbon stocks to current available data 2.6 Prepare and present information to professional and operational personnel on estimating forest carbon stocks

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	Interpret complex technical information on different methods for estimating forest carbon stocks and changes in carbon stock
Writing	Prepare written information on complex technical matters for use by a range of professional and non-professional audiences
Oral communication	Apply effective communication skills to ask questions and seek clarification on complex and unfamiliar technical concepts related to the contribution of forestry to carbon reduction
Numeracy	Collect, analyse and record complex statistical data related to sample site selection, sampling methods and interpretation of sampling data

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPFRM5002 Source information on the contribution of forestry to carbon reduction strategies	FWPFGM5219 Undertake carbon stock sampling of forest and plantations	New title Revised Application Statement to reflect change in scope of unit of competency Revised Elements and Performance Criteria Revised Performance Evidence and Knowledge Evidence Revised Assessment Conditions to reflect Standards for Training packages	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPFRM5002 Source information on the contribution of forestry to carbon reduction strategies

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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:

- researched and presented information on the contribution of forestry to carbon reduction to one professional and one operational audience
- researched and presented information on estimating forest carbon stock to one professional and one operational audience.

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 role of forests in the carbon cycle
- the impact of climate change on tree physiology and forest ecosystems
- the role of forests in climate change mitigation
- the key features and role of forestry in carbon reduction strategies:
 - carbon sequestration
 - emissions trading schemes
- key concepts used in estimating forest carbon stocks:
 - carbon pools
 - biomass
 - carbon stock
 - carbon fluxes
- types of carbon pools:
 - above ground biomass
 - below ground biomass
 - dead wood
 - litter

- soil organic carbon
- methods for estimating forest carbon stocks and changes in carbon stock:
 - estimation by default factors
 - estimation by modelling
 - estimation by measurement
- techniques for measuring land areas
- sampling design and sampling methods for estimating carbon stocks
- techniques for conducting measurements in sampling plots
- quality assurance and quality control techniques used in forest carbon inventory
- statistical analysis techniques applicable to biomass and carbon assessments
- methods used to predict biomass growth and carbon stock growth, specifically the use of growth models.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a forest work environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - reference materials on carbon reduction strategies and estimating forest carbon stock
- specifications:
 - workplace policies and procedures on estimating forest carbon stock.

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

Links

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