

Modification history

Release	Comments
Release 1	This version released with Agriculture Horticulture and Conservation and Land Management Training Package 4.0.
AHCCFP5X1	Comply with measuring and modelling requirements of a soil-based carbon farming method
Application	<p>This unit of competency describes the skills and knowledge required use measuring and modelling methods, required to comply with the Emissions Reduction Fund (ERF) reporting guidelines for land-based carbon farming projects. It covers the requirement to establish a project area and to take soil samples.</p> <p>The unit applies to farmers and land managers who aim to earn Australian Carbon Credit Units (ACCU) by increasing carbon sequestration or reducing greenhouse gas emissions on land. To be eligible, projects must comply with a project methodology (or method) approved for use under the Emissions Reduction Fund (ERF).</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite unit	Nil
Unit sector	Carbon Farming

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. Determine compliance obligations of carbon farming method	1.1 Identify ERF carbon farming method 1.2 Access ERF compliance requirements of method 1.3 Interpret requirements of method and prepare to meet requirements
2. Establish project area	2.1 Determine requirement for collection and reporting of geographic information, specific to method and Emissions Reduction Fund (ERF) guidelines 2.2 Use geospatial data to define project area and Carbon Estimation Areas (CEAs) 2.3 Define exclusion areas, as required by the project method
3. Design soil sampling to measure soil carbon	3.1 Develop a soil sampling plan for the project area including sampling to establish project baseline and over time 3.2 Use Global Positioning System (GPS) equipment to identify sampling locations 3.3 Collect soil core samples, avoiding region of disturbance from previous sampling rounds 3.4 Label soil samples with location details 3.5 Submit samples to approved laboratory for analysis 3.6 Calculate the organic carbon content soil samples and soil organic carbon (SOC) 3.7 Calculate the change in SOC over time within each CEA
4. Comply with reporting and record keeping requirements	4.1 Record soil sampling information using a format suitable for method 4.2 Estimate carbon offsets for reporting period utilising services of a qualified person, specified by method 4.3 Submit offsets report to the Clean Energy Regulator (CER) to determine if method has been implemented as required 4.4 Ensure records are secure and backed-up

Foundation Skills	
<i>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.</i>	
Skill	Description
Learning	<ul style="list-style-type: none"> • Research and manage complex information
Reading	<ul style="list-style-type: none"> • Interpret documentation from a variety of sources
Numeracy	<ul style="list-style-type: none"> • Read and interpret data in maps, tables, charts and graphs • Calculate soil organic carbon in soil samples

Unit mapping information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCCFP5X1 Comply with measuring and modelling requirements of soil-based carbon farming method		New unit	No equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet at: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72
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TITLE	Assessment requirements for AHCCFP5X1 Comply with measuring and modelling requirements of a soil-based carbon farming method
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has complied with the measuring and modelling requirements of a soil-based, Emissions Reduction Fund (ERF) approved, carbon farming method, including:</p> <ul style="list-style-type: none"> • established the project area utilising geospatial data • designed a soil sampling plan • collected soil samples • recorded soil sample information in a format used to report to the Clean Energy Regulator (CER). 	
Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • latest version of the <i>Carbon Credits (Carbon Farming Initiative) Act 2011</i> and Regulations • <i>Carbon Credits (Carbon Farming initiative) Rule 2015</i> • <i>Carbon Credits (Carbon Farming Initiative—Estimating Sequestration of Carbon in Soil Using Default Values) Methodology Determination 2015</i> • sources of geospatial data: <ul style="list-style-type: none"> • Global Positioning Systems (GPS) and Global Navigation Satellite System (GNSS) • field surveys and sampling • orthorectified aerial photographs • orthorectified satellite imagery • cadastral database • publicly available vegetation datasets • Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) software • Sequestration Value Maps • criteria used to assess fitness for purpose of datasets • ERF approved methods to increase stored (or sequester) carbon • <i>Carbon Farming Initiative Soil Sampling Design Method and Guidelines</i>, prepared by the Commonwealth Department of the Environment and Energy • formats used to report to the CER. 	
Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • resources: <ul style="list-style-type: none"> • GPS tools, approved ERF modelling tools and calculators • specifications: <ul style="list-style-type: none"> • access to legislation, regulations and information about carbon farming methods and markets. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
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