

EXPLANATORY STATEMENT

Issued by the Authority of the Minister for the Environment and Energy

Carbon Credits (Carbon Farming Initiative) Act 2011

*Carbon Credits (Carbon Farming Initiative—CFI Mapping Tool and Minor Corrections)
Methodology Determination Variation 2018*

Purpose

The *Carbon Credits (Carbon Farming Initiative—CFI Mapping Tool and Minor Corrections) Methodology Determination Variation 2018* (the **Variation**) amends seven methodology determinations made under the *Carbon Credits (Carbon Farming Initiative) Act 2011* (the Act).

The primary purpose of the amendments is to reflect the retirement of the online Carbon Farming Initiative Mapping Tool (CFI Mapping Tool) previously maintained by the Department of the Environment and Energy. The CFI Mapping Tool was always intended to be one option for proponents to map their projects, along with a number of other free and commercial tools that are readily available. Feedback from proponents has been that other software platforms are preferred such that the Government does not need to provide the CFI Mapping Tool. Accordingly, the Department of the Environment and Energy will no longer be supporting development and hosting of geospatial software for the Emissions Reduction Fund. Data that was previously provided from within the CFI Mapping Tool will now be available directly online on the Department of the Environment and Energy website.

The amendments around the CFI Mapping Tool remove references to the CFI Mapping Tool as it will no longer be available to map projects. Where a data layer is referenced in a determination in relation to the CFI Mapping Tool, these references will now refer to the relevant data on the Department's website: www.environment.gov.au.

Additionally, the Variation makes minor corrections to the *Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014* and in the *Carbon Credits (Carbon Farming Initiative) (Sequestering Carbon in Soils in Grazing Systems) Methodology Determination 2014*.

These amendments are of a minor nature. They are primarily to ensure that the methodology determinations continue to operate as originally intended and that there are no unintended consequences for eligible offsets projects wanting to apply the determinations.

The amendments will not affect projects that are already registered and using existing methods. Even after a determination has been varied, an eligible offsets project already registered can continue to use the determination in the form it was at the time the project was registered under section 126 of the Act. This is further explained below.

Legislative provisions

The methodology determinations to be varied were made under subsection 106(1) of the Act.

The Variation is made under subsection 114(1) of the Act, which empowers the Minister to vary, by legislative instrument, a methodology determination. Subsection 114(9) also applied to this Variation because the variations are of a minor nature.

Subsection 106(8) of the Act allows instruments, documents and tools, such as the CFI Mapping Tool and replacement data layers, to be incorporated into methodology determinations as in force from time to time.

Background

The Act enables the crediting of greenhouse gas abatement from emissions reduction activities across the economy. Greenhouse gas abatement is achieved either by reducing or avoiding emissions or by removing carbon from the atmosphere and storing it in soil or trees.

In 2014, the Australian Parliament passed the *Carbon Farming Initiative Amendment Act 2014*, which establishes the Emissions Reduction Fund (ERF). The ERF has three elements: crediting emissions reductions, purchasing emissions reductions, and safeguarding emissions reductions.

Emissions reduction activities are undertaken as offsets projects. The process involved in establishing an offsets project is set out in Part 3 of the Act. An offsets project must be covered by, and undertaken in accordance with, a methodology determination.

Subsection 106(1) of the Act empowers the Minister to make, by legislative instrument, a methodology determination. The purpose of a methodology determination is to establish procedures for estimating abatement (emissions reduction and sequestration) from eligible projects and rules for monitoring, record keeping and reporting. These methodologies ensure that emissions reductions are genuine—that they are both real and additional to business as usual.

In deciding to make a methodology determination the Minister must have regard to the advice of the Emissions Reduction Assurance Committee (ERAC), an independent expert panel established to advise the Minister on proposals for methodology determinations.

Subsection 114(9) allows the Minister to make variations of a minor nature to determinations, without seeking advice from the ERAC. In making variations of a minor nature the Minister must have regard to whether the varied determination complies with the offsets integrity standards, which are set out in section 133 of the Act. The Minister must also consider any adverse environmental, economic or social impacts likely to arise as a result of projects to which the determination applies.

Offsets projects that are undertaken in accordance with a methodology determination and approved by the Clean Energy Regulator (the Regulator) can generate Australian carbon credit units (ACCUs), representing emissions reductions from the project.

Project proponents can receive funding from the ERF by submitting their projects into a competitive auction run by the Regulator. The Government will enter into contracts with successful proponents, which will guarantee the price and payment for the future delivery of emissions reductions.

Further information on the ERF is available on the Department of the Environment and Energy website at:

www.environment.gov.au/emissions-reduction-fund.

Impact of the Variation on existing and new projects

The Variation will not affect projects that are already registered and using existing methodology determinations. Even after a determination has been varied, an eligible offsets

project already registered can continue to use the determination in the form it was at the time the project was registered under section 126 of the Act. For these projects the reference to the ability to use the CFI Mapping Tool in the original determination will be redundant as that tool will no longer be available, but the original determinations do not mandate the use of the CFI Mapping Tool for mapping of projects. As no projects currently apply the *Carbon Credits (Carbon Farming Initiative—Estimating Sequestration of Carbon in Soil Using Default Values) Methodology Determination 2015*, the change of location from which the maps are sourced will not affect any projects. In relation to the reference to the long term average rainfall map in the *Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014*, the Department's website will make clear that for existing projects, the new data source is taken to be the data from the CFI Mapping Tool for the purpose of that determination.

The project proponent may also choose to apply to the Regulator for approval to move to the varied determination under section 128 of the Act.

All applications for new eligible offsets projects with crediting starting after the commencement of this instrument, or any existing projects whose crediting period has not begun, will need to apply the methodology determinations as varied by this instrument.

Operation

The Variation amends the following methodology determinations:

Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014

Carbon Credits (Carbon Farming Initiative) (Human-Induced Regeneration of a Permanent Even-Aged Native Forest—1.1) Methodology Determination 2013

Carbon Credits (Carbon Farming Initiative) (Native Forest from Managed Regrowth) Methodology Determination 2013

Carbon Credits (Carbon Farming Initiative—Avoided Clearing of Native Regrowth) Methodology Determination 2015

Carbon Credits (Carbon Farming Initiative—Estimating Sequestration of Carbon in Soil Using Default Values) Methodology Determination 2015

Carbon Credits (Carbon Farming Initiative—Reducing Greenhouse Gas Emissions from Fertiliser in Irrigated Cotton) Methodology Determination 2015

Carbon Credits (Carbon Farming Initiative) (Sequestering Carbon in Soils in Grazing Systems) Methodology Determination 2014.

Public consultation

The Variation has been developed by the Department of the Environment and Energy in consultation with the Clean Energy Regulator. The Department invited comments from existing project proponents on the nature of the proposed changes. The Variation incorporates comments received during that consultation.

Determination details

The Variation is a legislative instrument within the meaning of the *Legislation Act 2003*.

The Variation commences on the day after it is registered.

Details of the Variation are at Attachment A.

A Statement of Compatibility prepared in accordance with the *Human Rights (Parliamentary Scrutiny) Act 2011* is at Attachment B.

Details of the Variation

1. Name

Section 1 provides that the name of the Variation is the *Carbon Credits (Carbon Farming Initiative—CFI Mapping Tool and Minor Corrections) Methodology Determination Variation 2018*.

2. Commencement

Section 2 provides that the Variation commences on the day after it is registered.

However, the amendments will not affect projects that are already registered and using existing methodology determinations. Even after a determination has been varied, an eligible offsets project already registered can continue to use the determination in the form it was at the time the project's crediting period started under section 126 of the Act.

Project proponents with existing projects may also choose to adopt the varied methodology determination by making an application under section 128 of the Act to apply the varied determination to their project.

All applications for new eligible offsets projects with crediting starting after the commencement of this instrument, or any existing projects whose crediting period has not begun, will need to apply the methodology determinations as varied by this instrument.

3. Authority

Section 3 provides that the Variation is made under subsection 114(1) of the Act.

4. Amendment of methodology determinations

Section 4 provides that Schedule 1 of the Variation varies the methodology determinations referred to in the Schedule.

Schedule 1 Amendments of methodology determinations

Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014

[1] Paragraph 1.2(a)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[2] Paragraph 1.2(b)

Item [2] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[3] Section 1.3

Item [3] repeals reference to the CFI Mapping Tool, which is being retired.

[4] After subsection 2.3(6)

Item [4] amends reference to the Long Term Average Rainfall map, formerly provided by the CFI Mapping Tool.

[5] After subsection 2.3(6)

Item [5] defines the Long Term Average Rainfall Map Layer. Previously accessible through the CFI Mapping Tool, this data layer is directly available on the Department's website: www.environment.gov.au. It is incorporated as in force from time to time consistent with subsection 106(8) of the Act to ensure the data remains up to date.

[6] Section 4.1

Item [6] amends reference from “the project area” to “all project areas”, to clarify that calculations are to include all project areas.

[7] Subsection 4.9(1)

Item [7] corrects an incomplete reference in the determination, by amending reference from “subsection (2)” to “subsection 4.8(2) or subsection 4.8(3)”.

[8] Section 4.10 (heading)

Item [8] amends the heading of the section from “Calculation of carbon stock change” to “Calculating initial carbon stock for project area”, to clarify the purpose of the section.

[9] Subsection 4.10(2)

Item [9] removes reference to the first offsets report and replaces it with reference to “a project area”, to ensure correct use of the initial carbon stock calculation so the deduction of the initial carbon stock is not duplicated after the first reporting period (which would result in an underestimate of abatement).

[10] Paragraph 4.10(2)(a)

Item [10] ensures references to “project area” and “project” are clear and work as intended.

[11] Paragraph 4.10(2)(b)

Item [11] removes reference to “projects” and replaces it with “project areas”, to ensure references “project area” and “project” are clear and work as intended.

[12] Subsection 4.10(3)

Item [12] inserts replacement text to ensure the calculation is used to calculate the initial carbon stock for the project area.

[13] Subsection 4.10(3) (table for equation 11a—cell at item, value of C_{Di})

Item [13] corrects reference to the initial carbon stock.

[14] Subsection 4.10(3) (table for equation 11a—cell at item, value of n_D)

Item [14] clarifies that the calculation applies to carbon estimation areas in the project area.

[15] Section 4.11 (table for equation 11b—item, value of n)

Item [15] clarifies that the calculation applies to carbon estimation areas in the project area.

[16] Subsection 4.12(1)

Item [16] clarifies how the initial carbon stock is calculated.

[17] Subsection 4.12(1) (table for equation 12a—item, value of C_{Di})

Item [17] removes reference to the first reporting period and replaces it with the declaration date to clarify correct use of the initial carbon stock calculation.

[18] Division 4.4 (heading)

Item [18] replaces the division heading to clarify the calculations are for the project area.

[19] Before subsection 4.15(1)

Item [19] inserts text to clarify that the carbon dioxide equivalent net amount for the project is the sum of amounts calculated for each project area.

[20] Subsection 4.15(1)

Item [20] clarifies that the formula applies to a project area.

[21] Subsection 4.15(1) (equation 18)

Item [21] corrects the definition of the net abatement amount to refer correctly to the previous carbon stock.

[22] Subsection 4.15(1)(table for equation 18—items, values of C_N and C_V)

Item [22] clarifies the definition of the previous carbon stock for calculation of the net abatement amount.

[23] Subsection 4.15(2)(second note)

Item [23] repeals the note referring to the removed table item C_v .

[24] Section 5.2

Item [24] removes reference to the CFI Mapping Tool.

[25] Section 5.8

Item [25] ensures references “project area” and “project” are clear and work as intended.

[26] Section 5.9

Item [26] ensures references “project area” and “project” are clear and work as intended.

[27] Section 5.10

Item [27] amends the reference to "carbon estimation area" to be "project area" in section 5.10 of the Determination. This concerns the ability to use partial reporting for the method and the section currently allows for the division of a project to individual carbon estimation areas. If a project area was subdivided this way for reporting, this would be inconsistent with the operation of the equations in the determination and result in uncertainty about how those equations should apply. Accordingly, the section will now ensure partial reporting includes whole project areas that are accounted for in the equations.

[28] Amendments of listed provisions—references to project area

Item [28] ensures references “project area” and “project” are clear and work as intended.

[29] Amendments of listed provisions—references to project area

Item [29] ensures references “project area” and “project” are clear and work as intended.

[30] Amendments of listed provisions—references to project area

Item [30] ensures references “project area” and “project” are clear and work as intended.

[31] Amendments of listed provisions—references to project area

Item [31] ensures references “project area” and “project” are clear and work as intended.

Carbon Credits (Carbon Farming Initiative) (Human-Induced Regeneration of a Permanent Even-Aged Native Forest—1.1) Methodology Determination 2013

[1] Section 3 (definition of CFI mapping tool)

Item [1] repeals reference to the CFI Mapping Tool, which is being retired.

[2] Section 24

Item [2] repeals reference to the Carbon Farming Mapping Tool, which is being retired. Mapping can be done with any geographic information system that meets the relevant geospatial information requirements of the CFI Mapping Guidelines.

Carbon Credits (Carbon Farming Initiative) (Native Forest from Managed Regrowth) Methodology Determination 2013

[1] Paragraph 1.2(a)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[2] Paragraph 1.2(b)

Item [2] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[3] Section 1.3

Item [3] repeals reference to the CFI Mapping Tool, which is being retired.

[4] Paragraph 2.5(4)(a)

Item [4] repeals reference to the CFI Mapping Tool, which is being retired.

[5] After Paragraph 2.5(4)

Item [5] defines the 1990 Forest Extent Layer. While previously accessible through the CFI Mapping Tool, a link to this data layer is now available on the Department's website: www.environment.gov.au. This data layer constitutes material in force and updated from time to time incorporated within the methodology determination under subsection 106(8) of the Act.

[6] Section 5.2

Item [4] repeals reference to the CFI Mapping Tool, which is being retired. Mapping can be done with any geographic information system that meets the relevant geospatial information requirements of the CFI Mapping Guidelines.

Carbon Credits (Carbon Farming Initiative—Avoided Clearing of Native Regrowth) Methodology Determination 2015

[1] Paragraph 4(b)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[2] Section 5 (definition of Carbon Farming Mapping Tool)

Item [2] repeals the definition of the CFI Mapping Tool, which is being retired.

[3] Paragraph 10(3)(b)

Item [3] repeals reference to the CFI Mapping Tool, which is being retired.

[4] After subsection 10(4)

Item [4] defines the Forest Cover Data Layer. While previously accessible through the CFI Mapping Tool, a link to this data layer is available on the Department's website: www.environment.gov.au. This data layer constitutes material in force and updated from time to time incorporated within the methodology determination under subsection 106(8) of the Act.

Carbon Credits (Carbon Farming Initiative—Estimating Sequestration of Carbon in Soil Using Default Values) Methodology Determination 2015

[1] Paragraph 4(b)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[2] Section 5

Item [2] repeals reference to the CFI Mapping Tool, which is being retired.

[3] Section 5

Item [3] defines the Sequestration Value Maps. These maps constitutes material in force and updated from time to time incorporated within the methodology determination under section 106(8) of the Act.

[4] Section 5 (definition of SA2 region)

Item [4] repeals reference to the CFI Mapping Tool, which is being retired, and inserts direct reference to the Sequestration Value Maps.

[5] Section 5 (definition of sequestration value)

Item [5] repeals reference to the CFI Mapping Tool, which is being retired, and inserts reference to the relevant Sequestration Value Maps.

[6] Subsection 47(2) (note)

Item [6] repeals the note to remove reference to the CFI Mapping Tool.

[7] Amendments of listed provisions- Replacement of table to section 101

Item [7] repeals reference to the CFI Mapping Tool, which is being retired, and substitutes reference to Sequestration Value Maps.

[8] Section 101 (cell at table item 13)

Item [8] repeals reference to the CFI Mapping Tool, which is being retired.

[9] Replacement of references to “soil carbon maps published on the CFI Mapping Tool”

Item [9] repeals reference to the CFI Mapping Tool, which is being retired, and substitutes reference to Sequestration Value Maps.

[10] Replacement of references to “soil carbon maps published on the CFI Mapping Tool”

Item [10] repeals reference to the CFI Mapping Tool, which is being retired, and substitutes reference to the relevant Sequestration Value Map.

Carbon Credits (Carbon Farming Initiative—Reducing Greenhouse Gas Emissions from Fertiliser in Irrigated Cotton) Methodology Determination 2015

[1] Paragraph 4(b)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[2] Section 14 (note 1)

Item [2] repeals reference to the CFI Mapping tool, which is being retired.

[3] Section 14 (note 2)

Item [3] modifies the number of the note to adjust for the amendment made in Item [2].

Carbon Credits (Carbon Farming Initiative) (Sequestering Carbon in Soils in Grazing Systems) Methodology Determination 2014

[1] Paragraph 1.2(a)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[2] Paragraph 1.2(b)

Item [1] amends reference to the *Legislative Instruments Act 2003* to the *Legislation Act 2003*.

[3] Section 1.3

Item [3] repeals the definition of the CFI Mapping Tool.

[4] Subsection 6.8(1)(Equation SC24)

Item [4] corrects a typographic error in the carbon stock equation, in which positive and negative signs are reversed.

This correction brings the subsection into line with the intention of the determination and its current legal meaning when equation SC24 is interpreted in its context. It fixes an error in the development of the original determination that was due to a software compatibility issue between different versions of software used. This is the same error in subsection 6.18(1) (equation SC37) and the same fix has been used.

A literal reading of equation SC24 as written before variation, calculated soil carbon stock change at a 40% probability of exceedance instead of the intended 60% probability of exceedance required by the determination. This is because the value of $t_{\alpha(df)}$ the equation is in fact a negative, even though that is not apparent from equations SC24 or the definitions for $t_{\alpha(df)}$ provided by section 6.8(1). The negative value of $t_{\alpha(df)}$ means that when the rules of BODMAS was applied to equation SC24, the equation as written resulted in calculation of a 40% probability of exceedance in the mean change in soil organic carbon between the t_0 and t_1 sampling rounds, rather than a 60% probability of exceedance.

Item [4] replaces the minus sign in the equation with a plus sign. This results in the mean change in soil organic carbon stock being exceeded 60% of the time, as is intended by section

6.18(1)(a) of the method. The reference to a “60% probability of exceedance” is an expression frequently used across the method.

Section 6.8(1) of the method makes clear that a “mean change in soil organic carbon stock that would be exceeded 60% of the time” is to be calculated using equation SC24. This intention is then repeated in the descriptions of the terms calculated by these equations (which is contained in section 6.8(1)), which also contain wording reiterating that the calculations of those terms have a 60% probability of exceedance. There are also numerous other references to “60% probability of exceedance” in the method (see sections 6.10, 6.11, 6.12, 6.13, 6.19, 6.20, 6.21 and 6.22). The numerous other references to 60% exceedance demonstrate a pre-occupation within the method with this concept, and indicate that the error, if any, lies in the text of equation SC24 rather than in the concept of 60% exceedance.

Further, reference to the explanatory statement for the method shows the concept of 60% exceedance has been adopted for the following reason:

The concept of conservativeness inherent in the method’s explanatory statement as the driving reason for adoption of the concept of 60% exceedance is inherent in the offsets integrity standard contained in section 133(1)(g) of the CFI Act with which all methods must comply – see section 106(4B) of the *Carbon Credits (Carbon Farming Initiative) Act 2011*. A 40% exceedance would not meet the test of conservativeness as it is below 50%, an even probability of exceedance.

[5] Subsection 6.18(1)(Equation SC37)

Item [5] corrects a typographic error in the carbon stock equation, in which positive and negative signs are reversed.

This correction brings the subsection into line with the intention of the determination and its current legal meaning when equation SC37 is interpreted in its context. It fixes an error in the development of the original determination that was due to a software compatibility issue between different versions of software used. This is the same error in subsection 6.8(1) (equation SC24) and the same fix has been used.

Item [5] replaces the minus sign in the equation with a plus sign. This results in the mean change in soil organic carbon stock being exceeded 60% of the time, as is intended by the intent reflected in section 6.18(1)(a) of the method. The reference to a “60% probability of exceedance” is an expression frequently used across the method.

Section 6.18(1) of the method also makes clear that “the average rate of corrected soil organic carbon stock exchange that would be exceeded 60% of the time” is to be calculated using equation SC37.

There are also numerous other references and indications in the determination and explanatory statement that point to the intention of a 60% probability. These are the same as those outlined above in item [4].

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Carbon Credits (Carbon Farming Initiative—CFI Mapping Tool and Minor Corrections) Methodology Determination Variation 2018

This Legislative Instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

The Carbon Credits (Carbon Farming Initiative—CFI Mapping Tool and Minor Corrections) Methodology Determination Variation 2018 (the Variation) amends *Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014*; *Carbon Credits (Carbon Farming Initiative) (Human-Induced Regeneration of a Permanent Even-Aged Native Forest—1.1) Methodology Determination 2013*; *Carbon Credits (Carbon Farming Initiative) (Native Forest from Managed Regrowth) Methodology Determination 2013*; *Carbon Credits (Carbon Farming Initiative—Avoided Clearing of Native Regrowth) Methodology Determination 2015*; *Carbon Credits (Carbon Farming Initiative—Estimating Sequestration of Carbon in Soil Using Default Values) Methodology Determination 2015*; *Carbon Credits (Carbon Farming Initiative—Reducing Greenhouse Gas Emissions from Fertiliser in Irrigated Cotton) Methodology Determination 2015*; and *Carbon Credits (Carbon Farming Initiative) (Sequestering Carbon in Soils in Grazing Systems) Methodology Determination 2014* (the methods).

The Variation amends the methods to remove reference to the online CFI Mapping Tool, which is no longer to be provided by the Department of Environment and Energy. The Variation also clarifies treatment of project areas and corrects carbon stock equations to ensure that the methodology determinations continue to operate as originally intended and that there are no unintended consequences for eligible offsets projects wanting to apply the determinations.

Human rights implications

This Legislative Instrument does not engage any of the applicable rights or freedoms.

Conclusion

This Legislative Instrument is compatible with human rights as it does not raise any human rights issues.

Josh Frydenberg, Minister for the Environment and Energy