Carbon Credits (Carbon Farming Initiative) (Native Forest from Managed Regrowth) Methodology Determination 2013[1]

Carbon Credits (Carbon Farming Initiative) Act 2011

I, GREG HUNT, Minister for the Environment, make this Methodology Determination under subsection 106(1) of the *Carbon Credits (Carbon Farming Initiative) Act 2011*.

Dated 6 November 2013

GREG HUNT

Minister for the Environment

Contents

Division 5.4   **Offsets report requirements**

Part 1   Preliminary

1.1   Name of Determination

This Determination is the *Carbon Credits (Carbon Farming Initiative) (Native Forest from Managed Regrowth) Methodology Determination 2013.*

1.2   Duration

    Note   See subsection 122(1) of the Act.

This Determination:

    (a) commences on the day after it is registered on the Federal Register of Legislative Instruments; and

    (b) unless sooner revoked, expires on the day before it would otherwise be repealed under subsection 50(1) of the *Legislative Instruments Act 2003*.

    Note   This Determination will expire on the first 31 March or 30 September on or after the tenth anniversary of its registration.

    Note   This Determination continues to apply after expiry in accordance with section 125 of the Act.

1.3   Definitions

In this Determination:

above ground biomass means all live material in a tree above the level of mineral earth and includes the stem and crown.

Act means the *Carbon Credits (Carbon Farming Initiative) Act 2011*.

baseline forecast period means the 100 years beginning from the implementation date, over which baseline carbon stocks in the carbon estimation area are modelled, or forecast, for a specified sequence of management events.

baseline management event scenario has the meaning given in section 4.12.

baseline model means the simulation of a baseline scenario in FullCAM.

baseline scenario means a sequence of management events that is used to determine the baseline for a carbon estimation area in a project to which this Determination applies.

below ground biomass means all live material in a tree below the level of mineral earth and includes the tap root or lignotuber, and the lateral roots.

C mass of biomass on-site means the sum of the carbon stock within each carbon pool that is included in the greenhouse gas assessment boundary specified in section 4.3.

C mass of trees means the carbon in above and below ground biomass of live trees.

carbon dioxide equivalent (CO$_2$-e) means the carbon dioxide equivalent mass of carbon or a greenhouse gas.

carbon estimation area means an area of land that is within the project area and that meets the requirements in section 3.3.

carbon pool means above ground biomass, below ground biomass or debris.

carbon stock of an area of land, at a specified time, means the quantity of carbon held within the area at that time as:

(a) above ground biomass;

(b) below ground biomass; and

(c) debris.

carbon stock change means the change or difference in quantity of carbon stock over a specified time and expressed in units of mass.

CFI Mapping Guidelines means the guidelines of that name, as published from time to time on the Department's website, to be used for mapping project areas and carbon estimation areas.

CFI Mapping Tool means the online mapping tool of that name, as published from time to time on the Department's website.

change in land management means a change in land management practice that enables the establishment of a native forest, and includes the cessation of mechanical or chemical destruction, or suppression, of regrowth of native plants, and may also involve one or more of the following:

(a) exclusion of livestock;

(b) management of the timing and extent of grazing;

(c) management, in a humane manner, of feral animals; or

(d) management of plants that are not native to the project area.

comprehensive clearing means the destruction of trees or saplings, or both, by mechanical or chemical means that may be accompanied by use of fire, leaving the land in a non-forested state for pastoral land use.

conservation land has the meaning given in Division 3.6 of the Regulations.

Data Builder functionality means the FullCAM function for downloading input data from the FullCAM server.

debris means above ground and below ground dead plant material.

default baseline management event scenario has the meaning given by section 4.12.

Department means the department that administers the Act.

derived vegetation cover data means satellite or aerial imagery that has been processed to show vegetation cover or other relevant vegetation attributes.

disturbance event means an event, whether natural or caused by humans, that affects the accumulation or loss of carbon stock within the greenhouse gas assessment boundary.

event queue means a series of management activities and their associated times as modelled in FullCAM.

exclusion area has the meaning given by section 3.5.

forest has the meaning given in the Regulations.

forest cover—land has *forest cover* if:

  (a) the land has an area of at least 0.2 of a hectare; and

  (b) the vegetation on the land includes trees that:

     (i) are 2 metres or more in height; and

     (ii) provide crown cover of at least 20% of the land.

forest potential—land has *forest potential* if:

  (a) the land has an area of at least 0.2 of a hectare; and

  (b) the vegetation on the land includes trees that have the potential:

     (i) to reach 2 metres or more in height; and

     (ii) to provide crown cover of at least 20% of the land.

fuel emissions means emissions of carbon dioxide (CO_2), nitrous oxide (N_2O), or methane (CH_4) arising from fossil fuel use in implementing the project mechanism.

FullCAM means the latest publicly released version on the Department's website of the Full Carbon Accounting Model used to model forest carbon stocks associated with land use and management for Australia's National Greenhouse Gas Inventory, and includes related databases and spatial inputs used by FullCAM for its calculations.

FullCAM Guidelines means the instructions for constructing in FullCAM the baseline and project models required by this Determination, as published from time to time on the Department's website.

historic baseline management event scenario has the meaning given by section 4.12.

hybrid baseline management event scenario has the meaning given by section 4.12.

implementation date means the date, for which there is documentary evidence of a kind specified in subsection 2.5(1), when the project mechanism was implemented in a carbon estimation area.

initial clearing means comprehensive clearing resulting in the initial conversion of the land from native forest to a non-forested state for pastoral land use.

management event means a land management activity that can be modelled in FullCAM, such as a planting, thinning, harvest, or fire.

material level means a level of C mass of trees in a carbon estimation area greater than 5% of the C mass of trees in the carbon estimation area at the end of the 100 years after the implementation date, as modelled using FullCAM in accordance with section 4.7.

material tree mortality means the death of more than 5% of trees in a carbon estimation area.

model point location means the location of a model point, identified by latitude and longitude, for use in FullCAM.

native vegetation means vegetation:

(a) consisting of species native to the local area; and

(b) with a mix of trees, shrubs, and understorey species that reflects the structure and composition of the local native vegetation community.

> Note   A monoculture may constitute native vegetation where it can naturally occur within the local vegetation community.

NGER Measurement Determination means the applicable determination made under subsection 10(3) of the *National Greenhouse and Energy Reporting Act 2007*.

NGER Regulations means the *National Greenhouse and Energy Reporting Regulations 2008*.

non-zero baseline scenario has the meaning given by section 4.11.

project commencement means the date, occurring on or after 1 July 2007, for which there is documentary evidence of a kind specified in subsection 2.5(1), of the first change in land management in the project area.

project mechanism has the meaning given by section 2.2.

project model means the simulation of the project in FullCAM.

project period means the 100 years following implementation date, over which carbon stocks in a carbon estimation area are modelled for a specified sequence of management events.

regeneration means the regrowing of native vegetation and tree stems from in-situ seed, rootstock or lignotuber sources in a carbon estimation area.

regrowth means trees or stems which result from regeneration on land that has been cleared of native forest.

Regulations means the *Carbon Credits (Carbon Farming Initiative) Regulations 2011*.

stratification means the division of the project area into one or more carbon estimation areas and, if required, exclusion areas.

thinning means the selective killing of trees for ecological purposes, including to maintain species diversity or ground cover.

tree has the meaning given in the Regulations.

zero baseline scenario has the meaning given by section 4.10.

> Note   Other words and expressions used in this Determination have the meaning given by the Act. These include:
>
> *baseline*
>
> *certificate of entitlement*

eligible offsets project

emission

greenhouse gas

native forest

offsets project

offsets report

project

project area

project proponent

Regulator; and

reporting period.

1.4 Type of project to which this Determination applies

Note See paragraphs 27(4)(b) and 106(1)(a) of the Act and paragraph 3.28(1)(c) of the Regulations.

(1) This Determination applies to a project that consists of human-induced regeneration, on or after 1 July 2007, of native vegetation, on land that is not conservation land.

(2) The human-induced regeneration referred to in subsection (1) must include the cessation of mechanical or chemical destruction, or suppression, of regrowth, and may also involve one or more of the following:

(a) exclusion of livestock;

(b) management of the timing and extent of grazing;

(c) management, in a humane manner, of feral animals; or

(d) management of plants that are not native to the project area.

Part 2 Requirements for declaration as eligible project

Note See paragraphs 27(4)(c) and 106(1)(b) of the Act.

2.1 Eligible projects

To be declared an eligible offsets project, a project to which this Determination applies must meet the requirements in this Part.

> *Note* In addition, a project must meet the requirements in section 27 of the Act and in the Regulations, including a requirement to provide, in an application for a declaration of an eligible offsets project, a geospatial map of the project area that meets the requirements of the CFI Mapping Guidelines (regulation 3.1), and that the project is not an excluded offsets project (regulations 3.36 and 3.37).

2.2 Project mechanism

The project must involve generating abatement through a change in land management which enables native vegetation to grow to achieve forest cover:

    (a) through the promotion and management of regeneration of in-situ seeds, rootstock or lignotubers; and

    (b) not through direct seeding or planting.

2.3 Decision to implement project mechanism

(1) There must be a documented decision to implement the project mechanism on land that meets the requirements specified in section 2.4.

(2) The decision to implement the project mechanism is taken to occur:

    (a) on the day when the project proponent applies to the Regulator for an eligible offsets project declaration; or

    (b) if:

        (i) the project proponent provides one or more types of evidence specified in paragraphs 2.5(1)(b)–(d); and

        (ii) the evidence demonstrates that the decision occurred on a date before the project proponent applied to the Regulator for an eligible offsets project declaration;

on the date that the decision occurred.

2.4 Land on which project mechanism is implemented

(1) This section sets out requirements for the land on which the project mechanism is implemented.

(2) The land must be in an area for which FullCAM data exists.

(3) The land must have been subject to at least one comprehensive clearing for pastoral use.

(4) Before the first comprehensive clearing specified in subsection (3) there must have been forest cover on the land.

(5) At the time of the decision specified in section 2.3, the land must:

    (a) have forest potential;

    (b) have native vegetation; and

    (c) not have forest cover.

2.5   Evidentiary requirements

Decision to implement project mechanism

(1) Evidence of a decision to implement the project mechanism as specified in section 2.3 may include:

    (a) an application to the Regulator for an eligible offsets project declaration;

    (b) records of activities that assist native forest regrowth such as records of:

        (i) fencing to exclude livestock, to remove other non-native animals, or to manage non-native plant species;

        (ii) cessation of mechanical or chemical destruction, or suppression, of regrowth;

    (c) registration of carbon property rights under state or territory carbon rights legislation; or

    (d) documents involving third parties indicating a clear intention of the project proponent to cease suppression of regrowth for the purposes of establishing a forest or commencing a project to sequester carbon.

    Note The third parties referred to in paragraph (d) may include livestock businesses, agricultural advisors, local planning bodies, legal advisors, or financial institutions.

Comprehensive clearing

(2) Evidence of the occurrence of comprehensive clearing specified in subsection 2.4(3) may include:

    (a) clearing permits;

    (b) farm management records of forest clearance or the chemical or mechanical suppression of regrowth;

    (c) aerial photography or other date-stamped, geo-referenced remotely-sensed imagery showing changes from forest cover;

    (d) derived vegetation cover data; or

    (e) published vegetation mapping indicating the presence of forest cover on the land prior to clearing.

Pastoral land use

(3) Evidence that the comprehensive clearing specified in subsection 2.4(3) was for pastoral use may include:

   (a) land use surveys;

   (b) business records;

   (c) property or herd management records; or

   (d) local area records.

Forest cover

(4) Evidence of the forest cover specified in subsection 2.4(4) may include:

   (a) the 1990 forest extent layer as shown by the CFI Mapping Tool; and

   (b) date-stamped, geo-referenced remotely-sensed imagery, including derived vegetation cover data.

Part 3 Requirements for operation of eligible projects

Division 3.1 Operation of eligible projects

3.1 Operation of eligible projects

An eligible offsets project to which this Determination applies must be operated in accordance with this Part.

Division 3.2 Stratification of the project area

3.2 Initial stratification of project area

Before submitting the first offsets report for the project, the project proponent must stratify the project area in accordance with the CFI Mapping Guidelines and with this Division.

3.3 Requirements for a carbon estimation area

(1) A carbon estimation area must:

    (a) consist of land on which the project mechanism is implemented;

    (b) be a single area with an unbroken outer perimeter;

    (c) contain a model point location that is at the approximate centre of the area; and

    (d) contain regrowth of the same forest type or vegetation community, in terms of likely mature structure and dominant tree species.

    Note A carbon estimation area should have consistent site characteristics that are based on actual site characteristics rather than estimates of growth rates within the carbon estimation area.

(2) The model point location specified in paragraph (1)(c) must not change unless the carbon estimation area in which it is located is re-stratified in accordance with section 3.6.

(3) The regeneration occurring in a carbon estimation area must:

    (a) be subject to the project mechanism;

    (b) occur in the same period of time after the last comprehensive clearing and prior to forest cover being reached; and

    (c) be uniformly managed.

3.4 Carbon estimation area boundaries

(1) The geographic boundaries of each carbon estimation area must be defined:

    (a) in accordance with the CFI Mapping Guidelines; and

    (b) using at least one of the following:

        (i) field surveys;

        (ii) aerial photographs;

        (iii) date-stamped, geo-referenced remotely-sensed imagery, including derived vegetation cover data;

        (iv) soil, vegetation or landform maps.

(2) The boundaries must be identified before submitting the first offsets report to the Regulator.

3.5 Requirements for an exclusion area

(1) Any land in the project area on which the project mechanism is not implemented must be defined as an exclusion area.

(2) The geographic boundaries of each exclusion area must be defined in accordance with the CFI Mapping Guidelines.

3.6 Re-stratification of project area

(1) The project area may be re-stratified only as provided in this Division.

(2) If the project area is re-stratified, the new boundaries must be identified in the next offsets report that is submitted to the Regulator.

Carbon estimation areas

(3) A carbon estimation area may be re-stratified into one or more carbon estimation areas or exclusion areas, or both, if one or more of the following occurs in the area:

    (a) the management of the regrowth ceases to be uniform across the area;

    (b) there is a disturbance event causing material tree mortality.

(4) The occurrence and extent of an event specified in subsection (3) may be identified by visual means including aerial photos or satellite imagery.

Exclusion areas

(5) An area of land on which the project mechanism is implemented must be re-stratified as an exclusion area if:

    (a) the land loses forest potential; or

    (b) regeneration fails to occur in a reporting period in any area greater than 0.2 of a hectare.

(6) If an area defined as an exclusion area exhibits regrowth as a result of the project mechanism, the area may be re-stratified as a carbon estimation area.

Division 3.3   Restricted activities

3.7   Harvesting

(1) Biomass must not be removed from a carbon estimation area except in accordance with this section.

(2) Up to 10% of fallen timber may be removed from a carbon estimation area in a calendar year for personal use.

(3) In this section:

personal use, of fallen timber, means use that does not involve the sale, or other commercial use, of the timber.

3.8   Grazing

If livestock grazing occurs in a carbon estimation area, the Regulator may request evidence that demonstrates, to the satisfaction of the Regulator, that the presence of the livestock in the area has not prevented the regrowth of native forest in that area.

Note   Evidence required under section 3.8 may include date-stamped, geo-referenced remotely-sensed imagery or derived vegetation cover data.

3.9   Thinning

(1) Trees in a carbon estimation area may be thinned in accordance with this section.

(2) The biomass resulting from thinning must remain in the carbon estimation area.

(3) Any forest cover must be maintained despite any thinning.

(4) Thinning must not result in a decrease in carbon stocks below the stocks reported for the carbon estimation area in the most recent offsets report.

(5) Thinning events must be included in the FullCAM model of project carbon stocks.

3.10   Use of lime or fertiliser

Lime or fertiliser must not be used in a carbon estimation area.

Part 4   The net abatement amount

Division 4.1   The net abatement amount

4.1   The net abatement amount

Note   See paragraph 106(1)(c) of the Act.

For an eligible offsets project to which this Determination applies, the carbon dioxide equivalent net abatement amount in relation to a reporting period for the project is taken to be the change in carbon stock for the total number of carbon estimation areas within the project area when compared to the baseline, less the project emissions.

Division 4.2   Calculations—Preliminary

Subdivision 4.2.1 General

4.2   General

In this Part if a calculation refers to a factor or parameter prescribed in the NGER Measurement Determination or the NGER Regulations, the person carrying out the calculations must apply, to the whole reporting period, that factor or parameter from the NGER Measurement Determination or NGER Regulations in force at the time that the offsets report is submitted or was required to be submitted, whichever is earlier.

4.3   Greenhouse gas assessment boundary

When making calculations under this Part:

(a)   the carbon pools and emission sources and the corresponding greenhouse gases in Table 1 must be taken into account; and

(b)   no other gases, carbon pools or emission sources may be taken into account.

Table 1: Gases accounted for in the abatement calculations

Carbon pool	Greenhouse gas
Live above ground biomass	Carbon dioxide (CO_2)
Live below ground biomass	Carbon dioxide (CO_2)
Debris	Carbon dioxide (CO_2)
Emission source	**Greenhouse gas**
Fuel use	Methane (CH_4) Nitrous oxide (N_2O) Carbon dioxide (CO_2)
Vegetation thinning—biomass left on site	Carbon dioxide (CO_2)
Fire—planned and unplanned	Methane (CH_4) Nitrous oxide (N_2O) Carbon dioxide (CO_2)

4.4   FullCAM modelling—calculating carbon stocks

For the purposes of calculating carbon stocks in a carbon estimation area, FullCAM must be used to determine:

(a) the inputs for the materiality test mentioned in section 4.7;

(b) if a non-zero baseline applies to the carbon estimation area—the modelled baseline carbon stocks; and

(c) for all carbon estimation areas—the modelled project carbon stocks.

Division 4.3   Baseline

Subdivision 4.3.1 Baseline—general

4.5   Baseline—general

(1) For the purposes of paragraph 106(4)(f) of the Act, the baseline for the project is the sum of the average baseline carbon stock for each carbon estimation area in the project area and is calculated in accordance with Equation 1.

(2) The baseline for a carbon estimation area must be determined in accordance with this Division, and must be either:

    (a) a zero baseline, as specified in Subdivision 4.3.2; or

    (b) a non-zero baseline, as specified in Subdivision 4.3.3.

4.6 Baseline—establishing forest potential date

Default forest potential date

(1) The default forest potential date is taken to be 12 months after the last comprehensive clearing in the carbon estimation area.

Evidence-based forest potential date

(2) A forest potential date other than the default date specified in subsection (1) may be used if a project proponent can demonstrate, to the satisfaction of the Regulator, that forest potential arose in the carbon estimation area on that date.

> *Note* Evidence that may be used to demonstrate the forest potential date includes:
>
>   (a) date-stamped geo-referenced remotely-sensed imagery including derived vegetation cover data; or
>
>   (b) expert information about local growth rates and rainfall data.

4.7 Baseline—materiality test

(1) This section sets out the requirements for determining whether the C mass of trees in a carbon estimation area in the 10 years before the implementation date reached a material level.

(2) For each carbon estimation area:

    (a) the C mass of trees in the 10 years before the implementation date must be calculated in accordance with section 4.8; and

    (b) five per cent of the C mass of trees 100 years after the implementation date must be calculated in accordance with section 4.9.

(3) If the C mass of trees in the 10 years before the implementation date is less than or equal to 5% of the C mass of trees 100 years after the implementation date, then the C mass of trees in the carbon estimation area did not reach a material level.

(4) If the C mass of trees in the 10 years before the implementation date is more than 5% of the C mass of trees 100 years after the implementation date, then the C mass of trees in the carbon estimation area reached a material level.

4.8 FullCAM modelling—C mass of trees 10 years before implementation date

(1) The C mass of trees in a carbon estimation area in the 10 years before the implementation date must be modelled in accordance with:

    (a) the requirements in this section; and

    (b) the FullCAM Guidelines.

(2) The following must be used in FullCAM:

    (a) if project-specific inputs are specified in the FullCAM Guidelines—those inputs; and

    (b) in all other cases—the default values downloaded through the Data Builder functionality in FullCAM or as specified by the FullCAM Guidelines.

(3) Modelling must commence on the day after the last comprehensive clearing before the 10 year period that ends on the implementation date.

> **Note** If no comprehensive clearing occurred before the 10 year period then a zero baseline will not be applicable.

(4) Modelling must end on the implementation date.

(5) Documentary evidence must demonstrate, to the satisfaction of the Regulator, the occurrence of the management events in the FullCAM event queue for the carbon estimation area from the day on which modelling commenced until the implementation date.

(6) The documentary evidence referred to in subsection (5) may include any of the followinig:

    (a) date-stamped geo-referenced remotely sensed imagery including derived vegetation cover data, forest cover mapping, or fire mapping demonstrating the timing and extent of the management events;

    (b) records of fuel used, herbicide used or labour employed for the management events;

    (c) farm management, business or company records.

4.9 FullCAM modelling—C mass of trees 100 years after implementation date

(1) The C mass of trees in a carbon estimation area 100 years after the implementation date must be modelled in accordance with:

    (a) the requirements in this section; and

    (b) the FullCAM Guidelines.

(2) The following must be used in FullCAM:

    (a) if project-specific inputs are specified in the FullCAM Guidelines—those inputs; and

    (b) in all other cases—the default values downloaded through the Data Builder functionality in FullCAM or as specified by the FullCAM Guidelines.

(3) Modelling must commence on the implementation date.

(4) Modelling must end 100 years after the implementation date.

(5) For the purposes of the materiality test specified in section 4.7, 5% of the C mass of trees mentioned in subsection (1) must be calculated.

Subdivision 4.3.2 Zero baseline

4.10   Zero baseline scenario

(1)   If:

    (a)   there has been comprehensive clearing in a carbon estimation area; and

    (b)   the C mass of trees in the carbon estimation area has not been material for the 10 years before the implementation date;

then for the purposes of this Determination the baseline for the carbon estimation area is taken to be zero.

(2)   For the purposes of paragraph (1)(b), the C mass of trees in a carbon estimation area is not material if:

    (a)   the C mass of trees as modelled using FullCAM did not reach a material level during the 10 years before the implementation date; and

    (b)   there is documentary evidence that demonstrates, to the satisfaction of the Regulator, that regrowth in the carbon estimation area has not exceeded 2 metres in height and 20% crown cover during the 10 years before the implementation date.

> *Note*   The materiality test set out in section 4.7 is used to determine whether the C mass of trees reached a material level during the 10 years before the implementation date.

> *Note*   The evidence referred to in paragraph (b) may include date-stamped, geo-referenced, remotely-sensed imagery, and derived data on forest cover.

(3)   If a zero baseline applies to a carbon estimation area, the baseline for that area is not required to be re-calculated during the project.

Subdivision 4.3.3 Non-zero baseline

4.11   Non-zero baseline scenario

(1)   If:

    (a)   the vegetation in a carbon estimation area has been managed for pastoral use; and

    (b)   the C mass of trees in the carbon estimation area has reached a material level in the 10 years before the implementation date;

then the baseline for the carbon estimation area is the long-term average of carbon stocks in the area as calculated in accordance with this Division and Equation 1.

> *Note*   The materiality test set out in section 4.7 is used to determine whether the C mass of trees in a carbon estimation area has reached a material level in the 10 years before the implementation date.

(2) For the purposes of subsection (1), the long-term average baseline carbon stock in a carbon estimation area:

    (a) is the average C mass of biomass on-site in the area based on a 100-year FullCAM event queue for the baseline forecast period; and

    (b) must be calculated for each reporting period in accordance with this Division and Equation 1.

(3) The 100-year FullCAM event queue referred to in paragraph (2)(a) must consist of the repetition of a baseline management event scenario outlined in section 4.12.

4.12   Baseline management event scenarios—general

(1) This section sets out the requirements for the baseline management event scenario that may apply to a carbon estimation area.

(2) A baseline management event scenario cannot apply to a carbon estimation area unless the relevant evidentiary requirements specified in section 4.13 are met.

(3) A project proponent must use one of the following baseline management event scenarios in the 100-year FullCAM event queue referred to in paragraph 4.11(2)(a):

    (a) a default baseline management event scenario;

    (b) a hybrid baseline management event scenario; or

    (c) an historic baseline management event scenario.

Default baseline management event scenario

(4) A default baseline management event scenario must consist of a sequence of comprehensive clearings that occur at 2 intervals of 15 years each.

(5) If documentary evidence shows, to the satisfaction of the Regulator, that fire was used to suppress regrowth on land on the same pastoral property as the carbon estimation area, fires of the type and frequency specified in the FullCAM Guidelines may be included in the default baseline management event scenario.

(6) Each comprehensive clearing in the default baseline management event scenario must be followed by re-establishment of forest on a date 12 months after the comprehensive clearing.

Hybrid baseline management event scenario

(7) A hybrid baseline management event scenario must consist of a sequence of comprehensive clearings that occur at 2 alternating intervals as provided by subsection (8).

(8) For the purposes of subsection (7):

    (a) the first interval is a period of 15 years; and

    (b) the second interval is a period equivalent to the period between the 2 most recent comprehensive clearings to have occurred in the carbon estimation area, which:

        (i) occurred before the implementation date; and

(ii) are verified in documentary evidence as having occurred, to the satisfaction of the Regulator.

> *Note* The first interval is based on a modelled default event, so it does not require evidence.

(9) Each comprehensive clearing in the hybrid baseline management event scenario must be followed by re-establishment of forest:

    (a) on a date 12 months after the comprehensive clearing; or

    (b) on a date other than the date specified in paragraph (a), if a project proponent can demonstrate, to the satisfaction of the Regulator, that forest potential arose in the carbon estimation area on that other date.

(10) If documentary evidence shows, to the satisfaction of the Regulator, that fire was used to suppress regrowth on land on the same pastoral property as the carbon estimation area, fires of the type and frequency specified in the FullCAM Guidelines may be included in the interval mentioned in paragraph (8)(a).

(11) If documentary evidence shows, to the satisfaction of the Regulator, that a management event other than a comprehensive clearing occurred in the carbon estimation area in the interval mentioned in paragraph (8)(b), the management event may be included in that interval.

Historic baseline management event scenario

(12) An historic baseline management event scenario must consist of a sequence of comprehensive clearings that occur at:

    (a) two intervals defined by the 3 most recent comprehensive clearings that can be demonstrated, to the satisfaction of the Regulator, to have occurred in the carbon estimation area before the implementation date; or

> *Note* The 2 intervals mentioned in paragraph (a) may have the same duration.

    (b) both:

        (i) the intervals mentioned in paragraph (a); and

        (ii) any additional interval defined by consecutive comprehensive clearings that can be demonstrated, to the satisfaction of the Regulator, to have occurred in the carbon estimation area before the implementation date.

(13) The comprehensive clearings used to define the intervals mentioned in subsection (12) must occur consecutively.

(14) If documentary evidence shows, to the satisfaction of the Regulator, that a management event other than a comprehensive clearing occurred in the carbon estimation area before the implementation date, that event may be included in the historic baseline management event scenario.

(15) Each comprehensive clearing in the historic baseline management event scenario must be followed by re-establishment of forest:

    (a) on a date 12 months after the comprehensive clearing; or

      (b) on a date other than the date specified in paragraph (a), if a project proponent can demonstrate, to the satisfaction of the Regulator, that forest potential arose in the carbon estimation area on that other date.

(16) In this section:

pastoral property means an area of land or contiguous areas of land owned by a single landowner and managed for pastoral purposes.

4.13   Baseline management event scenarios—evidentiary requirements

Evidence provided to the Regulator in accordance with section 4.12 may include:

      (a) date-stamped geo-referenced remotely sensed imagery;

      (b) derived vegetation cover data;

      (c) records of fuel used, herbicide used or labour employed; or

      (d) farm management, business or company records.

Subdivision 4.3.4 FullCAM modelling—non-zero baseline model

4.14   FullCAM modelling—non-zero baseline model

(1) If a non-zero baseline is applied to a carbon estimation area, FullCAM must be used to determine the baseline model for the area.

(2) For the purposes of subsection (1), the following must be used in FullCAM:

      (a) if values are specified in the FullCAM Guidelines—those values; and

      (b) in all other cases—the relevant default values in FullCAM.

(3) To avoid doubt, the default values in FullCAM must be used to determine the baseline model for a carbon estimation area, except where project-specific inputs are permitted by the FullCAM Guidelines.

(4) The baseline model for a carbon estimation area must cover the period:

      (a) beginning on the day after the last comprehensive clearing before the implementation date; and

      (b) ending on the last day of the baseline forecast period.

(5) The species setting specified in the FullCAM Guidelines must be selected as the species selection.

4.15   FullCAM modelling—baseline forecast period

(1) The FullCAM event queue used to calculate the long-term average baseline carbon stock in a carbon estimation area must consist of the repetition of a baseline management event scenario.

Event queue—default baseline management event scenario

(2) For the purposes of modelling carbon stocks through the baseline forecast period for a carbon estimation area to which a default baseline management event scenario applies, the event queue must consist of:

    (a) a clearing event occurring every 15 years from the most recent comprehensive clearing;

    (b) a regeneration event occurring 12 months after each comprehensive clearing event; and

    (c) if fire is included in the default baseline management event scenario in accordance with subsection 4.12(5)—a fire event.

Event queue—historic and hybrid baseline management event scenarios

(3) For the purposes of modelling carbon stocks through the baseline forecast period for a carbon estimation area to which an historic or hybrid baseline management event scenario applies, the event queue must reflect the complete sequence of management events repeated at the intervals specified in section 4.12, to the end of the baseline forecast period.

4.16   FullCAM modelling—fires in baseline model

Fires may be included in a baseline model only in accordance with the FullCAM Guidelines and with this Subdivision.

4.17   FullCAM modelling—estimating carbon stocks in baseline forecast period

(1) For each carbon estimation area in the project area:

    (a) the event queue determined in accordance with section 4.15 must be run to generate monthly estimates of carbon stocks for the baseline forecast period; and

    (b) the monthly estimates referred to in paragraph (a) must be averaged over the baseline forecast period to calculate the long-term average baseline carbon stock.

(2) The long-term average baseline carbon stock must be re-calculated in accordance with this Subdivision and Equation 4 for each reporting period.

Subdivision 4.3.5 FullCAM modelling—project model

4.18   FullCAM modelling—project model

(1) FullCAM must be used to determine the project carbon stocks for a carbon estimation area.

(2) For the purposes of subsection (1), the following must be used in FullCAM:

    (a) if project specific inputs are specified in the FullCAM Guidelines—those inputs; and

(b) in all other cases—the default values downloaded through the Data Builder functionality in FullCAM or as specified in the FullCAM Guidelines.

(3) To avoid doubt, the default values in FullCAM must be used to determine the project model for a carbon estimation area, except where project-specific inputs are specified in the FullCAM Guidelines.

4.19 FullCAM modelling—project period

(1) The project model for a carbon estimation area must cover the period:

(a) beginning on the day after the last comprehensive clearing before the implementation date; and

(b) ending on the last day of the project period.

(2) The following values must be used to model the project period in FullCAM:

(a) the relevant events that reflect actual management events specified in the FullCAM Guidelines; and

(b) the relevant species setting specified in the FullCAM Guidelines.

4.20 FullCAM modelling—estimating carbon stocks in project period

(1) For each carbon estimation area in the project area, the model determined in accordance with this Subdivision must be run to generate monthly estimates of carbon stocks for the project period.

(2) The estimates of carbon stocks for the project period must be re-calculated in accordance with this Subdivision and Equation 2 for each reporting period.

Division 4.4   Calculation of carbon stock change

4.21 Calculating long-term average baseline carbon stock for project area

(1) The long-term average baseline carbon stock for the project area is the sum of the long-term average baseline carbon stock for each carbon estimation area in the project area, and must be calculated using the following formula:

$$BC_{PA} = \sum_{i=1}^{n} BC_{CEA,i}$$

Equation 1

Where:

$BC_{PA} =$ long-term average baseline carbon stock (in tonnes C) for the project area.

$BC_{CEA,i} =$ long-term average baseline carbon stock (in tonnes C) for the ith carbon estimation area within the project area—see Equation 4.

Note   This will be zero if applying a zero baseline in the carbon estimation area.

n = total number of carbon estimation areas within the project area at the end of the current reporting period.

(2) Unless a zero baseline is applied to all carbon estimation areas in the project area, the long-term average baseline carbon stock for a project must be re-calculated at the end of each reporting period.

4.22 Calculating project area carbon stock at end of reporting period

The C mass of biomass on-site for the project area is the sum of FullCAM outputs (C mass of trees and C mass of debris) in each carbon estimation area and must be calculated at the end of each reporting period using the following formula:

$$C_{PA} = \sum_{i=1}^{n} C_{CEA,i}$$	**Equation 2**

Where:

C_{PA} = C mass of biomass on-site (in tonnes C) for the project area at the end of the current reporting period.

$C_{CEA,i}$ = C mass of biomass on-site (in tonnes C) for the ith carbon estimation area within the project area at the end of the current reporting period, calculated in accordance with Equation 3.

n = total number of carbon estimation areas within a project area at the end of the current reporting period.

4.23 Calculating carbon stock for carbon estimation area

The C mass of biomass on-site for a carbon estimation area is the sum of FullCAM outputs for carbon in tree and debris pools, and must be calculated using the following formula:

$$C_{CEA,i} = (CD_{CEA,i} + CT_{CEA,i}) \times A_{CEA,i}$$	**Equation 3**

Where:

$C_{CEA,i}$ = C mass of biomass on-site (in tonnes C) for the ith carbon estimation area at the end of the current reporting period.

$CD_{CEA,i}$ = C mass in debris pools (in tonnes C per hectare) for the ith carbon estimation area determined using FullCAM. $CD_{CEA,i}$ must be the value for the final month in the reporting period.

$CT_{CEA,i}$ = C mass of trees (in tonnes C per hectare) for the ith carbon estimation area determined using FullCAM. $CT_{CEA,i}$ must be the value for the final month in the reporting period.

$A_{CEA,i}$ = the area (in hectares) of the ith carbon estimation area.

4.24 Calculating long-term average baseline carbon stock for carbon estimation area

The long-term average baseline carbon stock for a carbon estimation area:

(a) is the average of monthly values for C mass of biomass on-site across the baseline forecast period multiplied by the area of the carbon estimation area; and

(b) must be calculated using the following formula:

$$BC_{CEA,i} = \frac{A_{CEA,i} \times \sum_{k=1}^{1200}(BCD_{CEA,i,k} + BCT_{CEA,i,k})}{1200} \qquad \textbf{Equation 4}$$

Where:

$BC_{CEA,i}$ = long-term average baseline carbon stock (in tonnes C) for the ith carbon estimation area.

$A_{CEA,i}$ = the area (in hectares) of the ith carbon estimation area.

$BCD_{CEA,i,k}$ = C mass in debris pools (in tonnes C per hectare) for the ith carbon estimation area in the kth month since the implementation date, determined using FullCAM.

$BCT_{CEA,i,k}$ = C mass of trees (in tonnes C per hectare) for the ith carbon estimation area in the kth month since the implementation date, determined using FullCAM.

1200 = the total number of months in the baseline forecast period.

k = the kth month of the baseline forecast period.

Note If a zero baseline applies to a carbon estimation area, the baseline for that area is not re-calculated during the project—see subsection 4.10(3).

4.25 Calculating carbon stock change for project area

The carbon stock change for the project area must be calculated using the following formula:

$$\Delta C_{PA} = C_{PA} - BC_{PA} \qquad \textbf{Equation 5}$$

Where:

ΔC_{PA} = Change in C mass of biomass on-site (in tonnes C) for the project area relative to baseline.

C_{PA} = C mass of biomass on-site (in tonnes C) for the project area—see Equation 2.

$BC_{PA} =$ long-term average baseline carbon stock (in tonnes C) for the project area—see Equation 1.

4.26 Converting carbon stock change to carbon dioxide equivalent (CO_2-e)

The carbon stock change in CO_2-e for the project for the reporting period must be calculated using the following formula:

$$\Delta C_{P,CO_2} = \Delta C_{PA} \times \frac{44}{12} \times GWP_{CO_2} \qquad \textbf{Equation 6}$$

Where:

$\Delta C_{P,CO_2} =$ carbon stock change (in tonnes CO_2-e) for the project.

$\Delta C_{PA} =$ carbon stock change (in tonnes C) for the project—see Equation 5.

$GWP_{CO_2} =$ global warming potential of carbon dioxide as specified in the NGER Regulations.

Division 4.5 Calculation of project emissions

4.27 Calculating methane and nitrous oxide emissions from biomass burning

(1) Emissions of methane (CH_4) due to biomass burning for the reporting period must be calculated using the following formula:

$$E_{P,CH_4} = GWP_{CH_4} \times \sum_{j=1}^{m} \sum_{i=1}^{n} (E_{CH_4,i} \times AB_i) \qquad \textbf{Equation 7}$$

Where:

$E_{P,CH4} =$ emissions of CH_4 (in tonnes CO_2-e) from biomass burning for the project for the reporting period.

$GWP_{CH_4} =$ global warming potential of methane as specified in the NGER Regulations.

$E_{CH4,i} =$ mass of CH_4 (in tonnes per hectare) emitted due to biomass burning from each carbon estimation area (i) for each month (j) in the reporting period, determined using FullCAM.

$AB_i =$ the area burnt (in hectares) in each carbon estimation area (i).

$m =$ number of months (j) in the reporting period.

$n =$ number of carbon estimation areas (i) within the project area.

(2) Emissions of nitrous oxide (N_2O) due to biomass burning for the reporting period must be calculated using the following formula:

$$E_{P,N_2O} = GWP_{N_2O} \times \sum_{j=1}^{m} \sum_{i=1}^{n} \frac{E_{N_2O,i} \times AB_i}{1000}$$

Equation 8

Where:

E_{P,N_2O} = emissions of N_2O (in tonnes CO_2-e) from biomass burning for the project for the reporting period.

GWP_{N_2O} = global warming potential of nitrous oxide as specified in the NGER Regulations.

$E_{N_2O,i}$ = mass of N_2O (in kilograms per hectare) emitted due to biomass burning from each carbon estimation area (*i*) during the reporting period, determined using FullCAM.

> *Note* While the FullCAM output for N_2O emitted is in kilograms per hectare, Equation 8 includes a factor to convert the result to tonnes CO_2-e.

AB_i = the area burnt (in hectares) in each carbon estimation area (*i*).

m = number of months (*j*) in the reporting period.

n = number of carbon estimation areas (*i*) within the project area.

(3) Total emissions due to biomass burning for the reporting period must be calculated using the following formula:

$$E_{P,F} = E_{P,CH_4} + E_{P,N_2O}$$

Equation 9

Where:

$E_{P,F}$ = total emissions (in tonnes CO_2-e) from biomass burning for the reporting period.

E_{P,CH_4} = emissions of CH_4 (in tonnes CO_2-e) from biomass burning for the project for the reporting period—see Equation 7.

E_{P,N_2O} = emissions of N_2O (in tonnes CO_2-e) from biomass burning for the project for the reporting period—see Equation 8.

4.28 Calculating emissions from fuel use

(1) Emissions from fuel use must be calculated in accordance with Equations 10 and 11:

    (a) from the end of the previous reporting period to the last month of the current reporting period; and

    (b) from either:

        (i) raw data; or

        (ii) estimates for quantities and types of fuel used.

(2) The fuel emissions for each fuel type and each greenhouse gas type (carbon dioxide, nitrous oxide and methane) for the reporting period must be calculated using the following formula:

$$E_{i,j} = \frac{Q_i \times EC_i \times EF_{i,j,oxec}}{1000}$$	**Equation 10**

Where:

$E_{i,j}$ =   fuel emissions for each fuel type (i) and each greenhouse gas (j) for the reporting period (in tonnes CO_2-e).

Q_i =   quantity of fuel type (i) (in kilolitres) combusted within the reporting period.

EC_i =   energy content factor of fuel type (i) (in gigajoules per kilolitre), as prescribed in Schedule 1 of the NGER Measurement Determination.

$EF_{i,j,oxec}$ = emission factor for each greenhouse gas (j) for fuel type (i) (in kilograms CO_2-e per gigajoule) as prescribed in Schedule 1 of the NGER Measurement Determination.

    Note   If Q_i is measured in gigajoules, then $EC_i = 1$.

    Note   The relevant energy content and emission factors are included, with worked examples, in the National Greenhouse Accounts Factors available via the Department's website.

(3) The total emissions from fuel for the reporting period must be calculated using the following formula:

$$E_E = \sum_{i=1}^{p} \sum_{j=1}^{q} E_{i,j}$$	**Equation 11**

Where:

E_E =   total project fuel emissions (in tonnes CO_2-e) for the reporting period.

$E_{i,j}$ = fuel emissions for each fuel type (i) and each greenhouse gas (j) (carbon dioxide, nitrous oxide and methane) (in tonnes CO_2-e) for the reporting period—see Equation 10.

p = the number of different types of fuel.

q = the number of different types of greenhouse gas (carbon dioxide, methane or nitrous oxide) emitted for a given fuel type.

Division 4.6   Calculation of the carbon dioxide equivalent net abatement amount

4.29   Calculating the carbon dioxide equivalent net abatement amount for a project

Note   See paragraph 106(1)(c) of the Act.

(1)   For an eligible offsets project to which this Determination applies, the carbon dioxide equivalent net abatement amount for the project in relation to a reporting period must be calculated using the following formula:

$$A_P = \Delta C_{P,CO_2} - E_F - E_E - PC - PE$$	**Equation 12**

Where:

A_P = project net abatement (in tonnes CO_2-e) for the reporting period.

$\Delta C_{P,CO_2}$ = carbon stock change (in tonnes CO_2-e) for the project relative to baseline—see Equation 6.

$E_{P,F}$ = total emissions from biomass burning (in tonnes CO_2-e) in the project area during the current reporting period—see Equation 9.

E_E = total project fuel emissions (in tonnes CO_2-e) for the reporting period—see Equation 11.

PC = total amount of abatement (in tonnes CO_2-e) in respect of which credits have previously been calculated as specified in subsection (2).

PE = total amount of emissions (in tonnes CO_2-e) in respect of which credits have previously been calculated as specified in subsection (3).

(2)   The total amount of abatement in respect of which credits have previously been calculated (PC) is calculated by summing project net abatement (A_P) from each previous offsets report.

(3)   The total amount of emissions in respect of which credits have previously been calculated (PE) is calculated by summing:

(a) total emissions from biomass burning (in tonnes CO_2-e) in the project area ($E_{P,F}$); and

(b) total project fuel emissions (in tonnes CO_2-e) (E_E);

from each previous offsets report.

(4) A certificate of entitlement must have been issued for each offsets report mentioned in subsection (2) or (3).

> *Note* For *certificate of entitlement*, see section 15 of the Act.

Division 4.7   Data collection

4.30   FullCAM inputs

(1) The model point location data for each carbon estimation area must be collected.

> *Note* Paragraph 3.3(1)(c) requires that a carbon estimation area must contain a model point location located at the approximate centre of the area.

(2) Data and information regarding management and disturbance events, including timing, intensity and area affected, for each carbon estimation area must be entered into FullCAM to generate estimates of carbon stocks for the area, in accordance with the FullCAM Guidelines.

4.31   FullCAM outputs

(1) The output data in Table 2 must be used when calculating abatement in accordance with this Part.

Table 2: FullCAM output data required for calculating abatement

FullCAM Output	Unit	Description	Form	Parameter
C mass of trees	tonnes C per hectare	Carbon stock in trees above ground and below ground biomass	Time series (cumulative monthly)	CT_{CEA}
C mass of debris	tonnes C per hectare	Carbon stock in debris	Time series (cumulative monthly)	CD_{CEA}
CH_4 emitted from debris due to fire	tonnes CH_4 per hectare	CH_4 emitted to the atmosphere	Time series (monthly)	$E_{CH4,i}$
N_2O emitted due to fire	kg N_2O per hectare	N_2O emitted to the atmosphere	Time series (monthly)	$E_{N2O,i}$

> *Note* FullCAM outputs referred to in masses of carbon, methane or nitrous oxide per hectare are converted to tonnes of CO_2-e in the Equations in this Part.

Part 5 Monitoring, record-keeping and reporting requirements

Note See subsection 106(3) of the Act.

Division 5.1 General

5.1 Application

For subsection 106(3) of the Act, a project proponent of an eligible offsets project to which this Determination applies must comply with the monitoring, record-keeping and reporting requirements of this Part.

5.2 Geospatial information requirements

The CFI Mapping Tool or a geographic information system that meets the requirements of the CFI Mapping Guidelines must be used to monitor and report on geospatial information in accordance with the CFI Mapping Guidelines.

Division 5.2 Monitoring requirements

5.3 Project monitoring

A project proponent must:

   (a) monitor:

      (i) the project area to ensure compliance with Part 3 and the CFI Mapping Guidelines;

     (ii) disturbance events within the project area to ensure the relevant inputs are entered into the FullCAM event queue in accordance with the FullCAM Guidelines; and

   (b) use one or more of the following to monitor that the project continues to implement the project mechanism:

      (i) on-ground observation;

     (ii) remote imagery or sensing;

    (iii) derived vegetation cover data.

Note The project mechanism is specified in section 2.2.

Division 5.3　　　Record-keeping requirements

5.4　　　Records that must be kept

Without limiting the foregoing, a project proponent must create and maintain the following records:

  (a)　documentary evidence of the decision to implement the project mechanism for each carbon estimation area;

  (b)　evidence that regrowth did not achieve forest cover before the change in land management in each carbon estimation area;

  (c)　evidence that land on which the project mechanism has been implemented was cleared from forest in order to be used for pastoral land uses;

  (d)　evidence that comprehensive clearing of regrowth on land in the project area was authorised by law;

  (e)　evidence of the timing of the most recent comprehensive clearing in a carbon estimation area;

  (f)　a description of how carbon estimation areas are identified;

  (g)　evidence to justify stratification within the project area, such as satellite imagery, soil, vegetation or landform maps;

  (h)　evidence of plant species or species mix regenerating within each carbon estimation area;

  (i)　ongoing evidence of the type specified in paragraph 5.3(b) that the project mechanism is being carried out and that the project is being monitored;

  (j)　if a zero baseline scenario is applied to a carbon estimation area, any evidence of the kind specified in subsection 4.8(5);

  (k)　the following information regarding any non-zero baseline scenario used to calculate the long-term average baseline carbon stock in a carbon estimation area:

     (i)　the baseline management event scenario used in accordance with section 4.12; and

     (ii)　any evidence of the type specified in section 4.13;

  (l)　date stamped FullCAM output files (.plo file) for the baseline scenario and the project period for each carbon estimation area in the project area;

  (m)　forest management information as specified in section 5.5;

  (n)　project area information as specified in section 5.6;

  (o)　the following information regarding fires occurring in a carbon estimation area after the implementation date:

     (i)　the date the fire occurred;

     (ii)　the area affected by the fire; and

     (iii)　the percentage of trees that were killed by the fire;

(p) all input data for FullCAM, and records demonstrating how the data was collected;

(q) the result of each Equation in Part 4; and

(r) records relating to fuel use on project activities.

Note Records referred to in paragraph (r) could include invoices, vehicle logbooks, records of project activities, or reports of calculated consumption based on hourly or per hectare consumption rates.

If fuel use records for project activities cannot be disaggregated from records for other non-project activities, estimates of project fuel use may be based on the time spent undertaking project activities and the known average fuel consumption of vehicles or machinery.

5.5 Forest management information

A project proponent must collect and maintain the following forest management information:

(a) in relation to each carbon estimation area:

   (i) the known vegetation management history from the time of initial clearing from forest, if available;

   (ii) the timing of the most recent comprehensive clearing in the area;

   (iii) evidence of forest potential;

   (iv) estimated tree density;

   (v) anticipated crown cover at maturity;

   (vi) the dominant regrowth sources including in-situ seed source, remnant trees, lignotubers, and coppice; and

   (vii) regenerating plant species or species mix;

(b) FullCAM inputs, including:

   (i) management events used to develop the model of carbon stocks for the baseline forecast period;

   (ii) type and timing of management events used in the model of project carbon stocks, including regeneration and thinning; and

   (iii) type, timing and extent of disturbance events;

(c) a description of any management actions or disturbance events that affected a carbon estimation area during the reporting period, including actions proposed and undertaken to ensure that carbon stocks are restored; and

(d) evidence that grazing, if any, has not affected the regrowth of native forest.

5.6 Project area information

A project proponent must create and maintain the following project area information:

(a) geospatial maps that identify:

    (i) the project area;

    (ii) carbon estimation areas;

    (iii) exclusion areas; and

    (iv) carbon estimation area model points;

(b) a list of names or other labels used to identify the project area and associated carbon estimation areas if the information specified in paragraph (a) is not clearly visible on the maps; and

(c) any adjustments to a carbon estimation area if:

    (i) the carbon estimation area no longer meets the requirements set out in Division 3.2; or

    (ii) changes in the management of the carbon estimation area result in the need for further stratification.

Division 5.4   Offsets report requirements

5.7 Information in first offsets report

The following information must be included in the first offsets report for a project to which this Determination applies:

(a) long-term average baseline and total project carbon stocks for each carbon estimation area;

(b) carbon dioxide equivalent net abatement amount for the project;

(c) carbon stock change for the first reporting period for the project;

(d) total emissions due to biomass burning for the project;

(e) total fuel emissions due to project activities;

(f) carbon stock for the project at the end of the reporting period;

(g) forest management information set out in section 5.5;

(h) project area information set out in section 5.6; and

(i) date stamped FullCAM plot files (.plo) and a copy of the associated output data in a spread sheet file (.xls) for each carbon estimation area in the project area.

5.8 Information in subsequent offsets reports

The following information must be included in the second and subsequent offsets report for a project to which this Determination applies:

(a) re-calculated long-term average baseline and total project carbon stocks for each carbon estimation area;

(b) carbon dioxide equivalent net abatement amount for the project for the reporting period;

(c) carbon stock change for the project for the reporting period;

(d) total emissions due to biomass burning for the project;

(e) total fuel emissions due to project activities;

(f) carbon stock for the project at the end of the reporting period;

(g) forest management information set out in section 5.5, including any change to the forest management information provided in the previous reporting period;

(h) date stamped FullCAM plot files (.plo) and a copy of the associated output data in a spread sheet file (.xls) for each carbon estimation area in the project area; and

(i) either:

   (i) a statement that the carbon estimation area boundaries do not need to be changed; or

   (ii) details of any change to the carbon estimation area or exclusion area information provided in the previous reporting period.

Note

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See http://www.frli.gov.au.