Exposure Draft

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Carbon Credits (Carbon Farming Initiative—Improved Forest Management in Multi-use Public Native Forest) Methodology Determination 2025

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Part 1—Preliminary

1 Name

This is the *Carbon Credits (Carbon Farming Initiative— Improved Forest Management in Multi-use Public Native Forest) Methodology Determination 2025*.

2 Commencement

This determination commences on [*to be specified*].

3 Authority

This determination is made under subsection 106(1) of the *Carbon Credits (Carbon Farming Initiative) Act 2011*.

4 Duration

This determination remains in force for the period that:

(a) begins when this instrument commences; and

(b) ends on the day before this instrument would otherwise be repealed under subsection 50(1) of the *Legislation Act 2003*.

5 Definitions

In this determination:

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

baseline scenario means the scenario in which the eligible offsets project was not carried out.

biomass means vegetation-derived organic matter, and includes living and non-living matter.

carbon protection area- see section 7.

carbon stocks means the amount of carbon (expressed in units of mass) stored in carbon pools that are relevant to calculating the net abatement amount as referred to in section 23.

carbon stock change means the change in carbon stocks (expressed in units of mass) over a specified period of time.

clearing, for facilitating timber harvesting, includes for example clearing public native forests for roads to access the timber harvesting area, for snig tracks to remove cut timber or for landings to collect logs for haulage.

commercial forestry use means the use of a public native forest for the purposes of obtaining wood for sale.

debris means above-ground or below-ground dead plant material.

disturbance means degradation or disturbance.

financial year means a period of 12 months starting on 1 July.

forest management includes prescribed burns and emergency back-burning or mechanical clearing for firebreaks to prevent the spread of a wildfire.

forestry region means:

(a) a region or regions covered by a regional forest agreement under the *Regional Forest Agreements Act 2002* on 1 July 2024; or

(b) in the case of public native forests that are not covered by any such regional forest agreement - an area of those forests that is not less than 1.5 million hectares and that is designated by the government of the relevant State as at 1 July 2024 as an applicable area for the purposes of the management of those forests.

Note: The definition of forestry region requires that, where a regional forest agreement applies to two or more regions or sub-regions, the regions or sub-regions covered by the agreement must be treated as a single region for the purposes of this determination.

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.

Note: The Department's website is www.environment.gov.au.

FullCAM Guidelines means the FullCAM Guidelines for this determination, as published from time to time on the Department's website.

haulage operations include road building.

major disturbance event means a disturbance that is likely to reduce carbon stocks by more than 15% across more than 20% of the net harvestable area. For this definition, the net harvestable area is determined as at the date the application was made for the declaration of the project as an eligible offsets project.

major vegetation group means a major vegetation group as defined in the National Vegetation Information System.

Mapping Guidelines means the Mapping Guidelines for this determination, as published from time to time on the Department's website.

National Vegetation Information System means the latest publicly released version on the Department's website of the National Vegetation Information System.

native forest means an area of land that:

(a) contains trees that have attained, or have the potential to attain, a crown cover of at least 20% of that area of land; and

(b) contains trees that have reached, or have the potential to reach, a height of at least 2 metres; and

(c) contains trees forming the crown cover that are within their natural range; and

(d) is not a plantation.

A particular area of land is not native forest unless it is at least 0.2 of a hectare and each 0.2 of a hectare of the area satisfies the requirements of paragraphs (a)-(d).

net abatement amount, for an eligible offsets project, means the carbon dioxide equivalent abatement amount for the project in the reporting period for the purposes of subsection 106(1)(c) of the Act.

net harvestable area means the portion of the public native forests in the project area that is available for timber harvesting after accounting for areas that are excluded from harvesting due to regulatory and operational constraints (including, for example, restrictions on harvesting due to the slope of the land, environmental factors or safety). The ***net harvested area*** is so much of the net harvestable area in the project area that has been subjected to actual harvesting over a specified period (other than an area cleared to facilitate timber harvesting).

plantation means an area of land that:

(a) is planted with trees, whether by direct seeding or by using seedling stock, for the purpose of the harvesting of timber products; and

(b) is not managed to provide a reasonable degree of consistency between the composition and structure of the vegetation on the land and the native vegetation that was on the land before the later of:

  (i) 1788; or

  (ii) when it was first subject after 1788 to commercial forestry use or mechanical clearing.

prescribed burn means the controlled application of fire in a selected area (including post harvest) for hazard reduction, cultural conservation practices or other natural resource management objectives.

prior period - see subsection 28(1).

prior period FullCAM forest estate model - see subsection 28(5).

project area - see subsection 7(4).

project map - see section 15.

project scenario means the scenario in which the eligible offsets project is carried out.

public native forest means a native forest in Australia that is Crown land.

pulplog means a log that is mainly used to produce woodchips.

reduce timber harvesting - see section 8.

road includes track.

sawlog includes a log that is used to produce sawn timber, veneers, poles, piles or girders, but does not include a pulplog or residue.

State includes Territory of the Commonwealth.

stop timber harvesting - see section 7.

sustainable yield estimate, for the public native forests in the project area, means an estimate (based on continued commercial forestry use of those forests) of the long-term wood yield from those forests that could be maintained in perpetuity under stated forest management strategies and sustainable use objectives.

timber harvesting means the carrying out of harvesting operations to obtain logs for timber products.

tree means a perennial plant that has primary supporting structures consisting of secondary xylem.

Note: Other words and expressions used in this determination have the meaning given by the Act. These terms include:

crediting period, ***Crown land***, ***eligible offsets project***, ***emission***, ***natural disturbance***, ***offsets project***, ***project***, ***project area***, ***project proponent***, ***Regulator***, ***reporting period***

Part 2—Offsets projects to which determination applies

6 Determination applies to projects to stop or reduce timber harvesting in public native forests

(1) For subsection 106(1)(a) of the Act, this determination applies to an offsets project:

(a) that:

(i) removes carbon dioxide from the atmosphere by sequestering additional carbon in trees and debris in public native forests as a result of a decision of the government of a State to stop or reduce timber harvesting in those forests; and

(ii) avoids the emission of greenhouse gases attributable to timber harvesting in those forests; and

(b) that can reasonably be expected to result in eligible carbon abatement.

(2) Forest management activities may be undertaken in the public native forests to which an offsets project applies.

7 Projects to stop timber harvesting

(1) An offsets project to stop timber harvesting is a project to stop timber harvesting indefinitely.

Note: Sections 17 and 18 provide that eligible offsets projects must have a 100-year permanence period and provide for the relinquishment of carbon credits if harvesting is resumed during that period.

(2) An offsets project to stop timber harvesting may relate to stopping timber harvesting across the whole of the project area or only in one or more parts of the project area.

(3) An area in which timber harvesting is stopped under an offsets project is a **carbon protection area**.

(4) A carbon protection area cannot be removed from an eligible offsets project or reduced in size, but additional carbon protection areas can be included in the project or an existing carbon protection area can be increased in size.

(5) If timber harvesting is stopped in only a part of the project area, the whole area remains the project area for this determination.

Note: Section 12 provides that the minimum project area must include the commercial public native forests in at least one whole forestry region. Even though an offsets project may relate to stopping timber harvesting in a part only of the project area, the modelling of carbon stock change for carbon crediting under this determination is based on carbon stock change across the whole project area. Section 45 provides that carbon abatement is not eligible for carbon credits unless it meets the hurdle requirement for a minimum reduction in the volume of wood extracted from the project area.

8 Projects to reduce timber harvesting by deferral of harvesting

(1) An offsets project to reduce timber harvesting is a project to reduce the total amount of timber harvesting by deferring timber harvesting and thereby extending the length of harvest rotations and reducing the volume of wood extracted from the project area over a given period.

(2) An offsets project to reduce timber harvesting may relate to reducing timber harvesting across the whole of the project area or only in one or more parts of the project area.

(3) An offsets project may comprise both a project to stop timber harvesting in one or more carbon protection areas and a project to reduce timber harvesting in other parts of the project area.

Part 3—Project requirements

Division 3.1—General

9 Operation of this Part

For subsection 106(1)(b) of the Act, this Part sets out requirements that must be met for a project to which this determination applies to be an eligible offsets project.

Note: Part 3 of the Act provides that the Regulator may, on application, declare an offsets project to be an eligible offsets project if it meets the requirements of this Part and other requirements.

Division 3.2—Eligibility requirements

10 Designation of public native forests for commercial forestry use

(1) The project area for the eligible offsets project must consist only of public native forests:

(a) that are designated for commercial forestry use at the time the project is declared under the Act as an eligible offsets project; and

(b) that were designated for commercial forestry use for at least 10 years before the application was made under the Act for that declaration.

(2) For this section, a public native forest is designated for commercial forestry use if it is available for commercial forestry use under the applicable law relating to the use of the forest.

(3) It does not matter that the public native forests included in the project area are multi-use forests not exclusively used for commercial forestry.

(4) A carbon protection area included in an eligible offsets project remains part of the project area for this determination even if, after the project becomes an eligible offsets project, it is no longer designated for commercial forestry use because it becomes a national park or other reserve or subject to any other applicable law that prevents commercial forestry use.

(5) A public native forest is available for commercial forestry use even though:

(a) an authority is required to be issued by a government agency for the carrying out of a particular timber harvesting operation; or

(b) surveys, plans or other preliminary steps are required before timber harvesting can commence; or

(c) particular areas or trees are required to be excluded from timber harvesting; or

(d) because of the size of the trees, because of the slope of the land, because the trees provide or are likely to provide habitat for particular fauna or flora or for any other reason.

11 No previous law or decision to stop or reduce timber harvesting

(1) An area cannot be included in the project area for an eligible offsets project if, at any time between 1 January 2000 and the date the project is declared under the Act as an eligible offsets project:

(a) a law of the Commonwealth or the relevant State stopped timber harvesting in the area (even if the law has since been repealed or amended to remove that prohibition); or

(b) the government of the relevant State decided to stop timber harvesting in the area (even if the decision has since been changed to remove that prohibition or the decision was scheduled to take effect after the date this determination commences).

(2) Subsection (1) does not apply if:

(a) the stopping of timber harvesting in the area was an interim or temporary measure to enable an assessment of the suitability of all or any part of the area for inclusion in an eligible offsets project or a conservation reserve; or

(b) the decision to stop timber harvesting in the area was made in connection with an offsets project and on condition that the project is declared an eligible offsets project.

(3) For a project to be declared under the Act as an eligible offsets project, the stopping or reduction of timber harvesting that is the basis of the declaration must not be required by or under a law of the Commonwealth or the relevant State:

(a) that is in force when the declaration is to be made; or

(b) that was in force at any time between 1 January 2000 and the date that the declaration is to be made.

(4) Subsection (3) does not apply if the law requiring the stopping or reduction of timber harvesting in the area was an interim or temporary measure to enable an assessment of the suitability of all or any part of the area for inclusion in an eligible offsets project or a conservation reserve and the law has since been repealed or amended to remove the requirement to stop or reduce timber harvesting.

(5) The requirements of this section are, for the purposes of subsection 27(4A)(b)(ii) of the Act, declared to be requirements made in lieu of the regulatory additionality requirement.

12 Minimum size of project area

(1) The project area for an eligible offsets project must consist of all public native forests designated for commercial forestry use (as provided by section 10) in at least one whole forestry region.

(2) The project area must not include any area:

(a) that is excluded by this determination from being included in the project area; or

(b) that is included in the project area for another eligible offsets project under this determination.

(3) For subsection 77A(2) of the Act, a division of the overall project must not result in the creation of a part of the project area that does not comprise at least all the public native

forests designated for commercial forestry use in one whole forestry region or take effect during a reporting period for the project.

13 Minimum reduction in volume of wood extracted from project area

The stopping or reduction of timber harvesting under an eligible offsets project must be likely to achieve, during each 12 months of the whole of the 15-year crediting period, a reduction in the volume of wood extracted from the project area that meets the hurdle requirement of subsection 45(1) for eligible carbon abatement.

Note: The hurdle requirement for a 12-month period requires a reduction in the volume of wood extracted from the project area during that 12-month period to be at least 20% less than the level in the baseline scenario for the same 12-month period.

14 Published sustainable yield for public native forests

(1) The public native forests in the project area must have a sustainable yield that was published by a relevant State government agency during the period from 1 July 2014 to 30 June 2024.

(2) The sustainable yield must provide a sustainable yield estimate for each financial year in the period of 15 years from the declaration of the project as an eligible offsets project.

(3) If more than one relevant sustainable yield was published by the relevant State government agency during the period from 1 July 2014 to 30 June 2024, the most recent estimate is to be used for this determination.

15 Project area mapping

(1) The project proponent must prepare, in accordance with this section, a geospatial map of the project area in a digital format (**the project map**).

(2) The project map must be provided to the Regulator when application is made under the Act for the declaration of the project as an eligible offsets project.

(3) The project map must identify the boundaries of the following.

(a) The project area.

(b) The forestry region or regions in which the project area is located.

(c) Any proposed carbon protection area.

(4) The project map must identify:

(a) the spatial distribution of each major vegetation group across the project area; and

(b) the age class of the public native forests in the project area by major vegetation groups (set out separately for carbon protection areas and other areas).

(5) The project map may be revised (and the revised map provided to the Regulator) at any time before the declaration of the project as an eligible offsets project.

(6) The project map must be revised (and the revised map provided to the Regulator):

(a) when an application is made for the variation of the project area under section 29 of the Act; and

(b) when any additional carbon protection area is included in the project or an existing carbon protection area is increased in size; and

(c) when any correction is required to the information referred to in subsection (4).

Note: Section 7(4) precludes the removal of a carbon protection area from an eligible offsets project or a reduction in the size of a carbon protection area included in the project.

(7) The project map must be prepared in accordance with the Mapping Guidelines.

16 Project proponent

The project proponent required to be identified in the declaration of the project as an eligible offsets project in accordance with subsection 27(3)(c) of the Act must be the government of the State in which the public native forests to which the project applies are located or an authority of the State designated by that government for the purposes of this determination.

17 Permanence period for project of 100 years

The applicant for the declaration of a project as an eligible offsets project must request the Regulator to treat the project as a 100-year permanence period project.

Note: Under subsection 27(3) of the Act, the Regulator, when declaring a project to be an eligible offsets project, is to declare, at the request of the applicant, whether the project is a 100-year or a 25-year permanence period project.

18 Relinquishment of carbon credits if harvesting resumed during permanence period

(1) Before a project is declared under the Act as an eligible offsets project, the project proponent must have entered into an enforceable undertaking in accordance with this section to address the risk of a resumption of timber harvesting after the end of the crediting period for the project.

(2) An enforceable undertaking is a binding undertaking given by the project proponent to the Regulator (whether by deed poll or other written instrument) to relinquish Australian carbon credit units in the event of a resumption of timber harvesting after the end of the crediting period for the project and before the end of the 100-year permanence period.

(3) For this section, a resumption of timber harvesting occurs if:

(a) timber harvesting resumes in any part of a carbon protection area for the project; or

(b) in accordance with the modelling procedures set out in the undertaking, during any 2-year period:

(i) the volume of wood extracted from the project area exceeds the levels in the baseline scenario for the project; or

(ii) the volume of wood extracted from the public native forests in the State in which the eligible offsets project is located (other than those in the project area for the project or in the project area for any other eligible offsets project) exceeds the direct leakage baseline harvest level under section 42; or

(iii) the volume of wood extracted from native forests in the State in which the project is located (other than from public native forests) exceeds the private native forests leakage baseline harvest level under section 43.

(4) An enforceable undertaking must provide that the number of Australian carbon credit units required to be relinquished in the event of a resumption of timber harvesting:

(a) is to be calculated in a manner that is consistent with the procedure for calculating the direct leakage deduction under section 42, substituting baseline harvest level or private native forests leakage baseline harvest level where appropriate for the references to the direct leakage baseline harvest level and using a 10-year simulation period to estimate the difference in net emissions between the no harvest and harvest scenarios; and

(b) is to be doubled if there has been a resumption of timber harvesting in a carbon protection area for the project.

Division 3.3—Management plan for project area

19 Preparation of management plan

(1) The project proponent must prepare a management plan for the project area.

(2) The management plan must be provided to the Regulator when application is made under the Act for the declaration of the project as an eligible offsets project.

(3) The management plan must include the project map and the following information.

(a) The harvest level in the baseline scenario for the project area (in cubic metres (m3) of logs produced and hectares harvested), as calculated in accordance with Division 5.4.

(b) The direct leakage baseline harvest level and the private native forests leakage baseline harvest level for the project (in cubic metres (m3) of logs produced), as calculated in accordance with Division 5.7.

(c) The volume of wood proposed to be extracted from the project area during each 12 months of the whole 15-year crediting period (being a volume that meets the project eligibility requirement of section 13).

(d) Details on how that reduction in the volume of wood to be extracted will be achieved.

20 Amendment and publication of management plan

(1) The project proponent may amend the management plan under this Division and provide the amended plan to the Regulator.

(2) The management plan may be amended at any time before or after the declaration of the project as an eligible offsets project.

(3) The amended management plan must include the information required by this Division to be included in the management plan.

(4) An amended management plan cannot increase the volume of wood proposed to be extracted from the project area during each 12 months of the crediting period.

(5) The project proponent must publish the current management plan on its website.

21 Compliance with management plan

The requirements of this Part for the registration of a project as an eligible offsets project include the requirement that the public native forests in the project area are managed in accordance with the management plan under this Division.

Note: Because of this section, the Regulator will be authorised under section 32 of the *Carbon Credits (Carbon Farming Initiative) Rule 2015* to revoke unilaterally the declaration of an eligible offsets project if the project proponent does not comply with the management plan.

Part 4—Crediting period for projects

22 Crediting period for projects of 15 years

For subsection 69(2)(b) of the Act, the crediting period for an eligible offsets project to which this determination applies is 15 years.

Part 5—Net abatement amount

Division 5.1—Preliminary

23 Operation of this Part

For subsection 106(1)(c) of the Act, this Part specifies the method for calculating the carbon dioxide equivalent net abatement amount for an eligible offsets project in relation to a reporting period.

24 Carbon pools and emission sources relevant to calculating net abatement amount

(1) The following table outlines the carbon pools, emissions sources and greenhouse gases that are relevant to calculating the net abatement amount.

Carbon pool or emission source	Type	Greenhouse gas
Carbon pool	Live above-ground biomass in the forest	Carbon dioxide (CO_2)
	Live below-ground biomass in the forest	Carbon dioxide (CO_2)
	Above-ground or below-ground forest debris	Carbon dioxide (CO_2)
	Harvested wood products in service	Carbon dioxide (CO_2)
	Harvested wood products in landfill	Carbon dioxide (CO_2)
Emission source	Biomass burning from post harvest (slash) burns	Methane (CH_4) Nitrous oxide (N_2O)
	Combustion of fossil fuels in connection with timber harvesting and haulage operations	Carbon dioxide (CO_2) Methane (CH_4) Nitrous oxide (N_2O)

(2) The following carbon pools and emissions sources are excluded in calculating the net abatement amount.

(a) Soil organic carbon.

(b) CH_4 and N_2O emissions from wildfires or non-harvest related prescribed burns.

(c) Emissions from the combustion of fossil fuels in connection with forest management, other than timber harvesting or haulage operations.

(d) Emissions from the combustion of fossil fuels in connection with the processing of harvested logs, the production of woodchips or the manufacture of solid wood products.

25 Summary of method for calculating net abatement amount

(1) The net abatement amount for a reporting period is calculated in accordance with Equation 1 as the difference between the carbon stock change in the project scenario and the carbon stock change in the baseline scenario, plus the difference in emissions from included sources in the baseline scenario and emissions from included sources in the project scenario, minus the leakage deduction, plus the aggregate negative abatement amount in the aggregate negative abatement account at the end of the reporting period (if any).

Note: Carbon abatement is not eligible for carbon credits unless it meets the hurdle requirement of section 45 for a minimum reduction in the volume of wood extracted from the project area.

(2) The following is a summary of the steps required to calculate the net abatement amount.

Step 1: Representative FullCAM model plots must be developed based on the timber harvesting and related forest clearing to facilitate timber harvesting (eg for access roads, snig tracks and log landings) that occurred in the 5-year period prior to the end of the financial year prior to the making of the application for the declaration of the project as an eligible offsets project (the prior period). The model plots must be used to develop a prior period FullCAM forest estate model that provides estimates of the total net harvested area (in hectares) in, and logs produced (in cubic metres (m^3) of logs produced) from, the project area that are within ±5% of the actual values for the prior period.

Step 2: The baseline harvest level, in cubic metres (m^3) of wood harvested, must then be calculated. The baseline harvest level, in volume of wood harvested, must be converted to a net area subject to harvesting in the baseline scenario (in hectares) using the prior period FullCAM forest estate model from Step 1. The baseline harvest level and the net harvested area in the baseline scenario are used to model carbon stock changes and emissions in the baseline scenario and are intended to reflect a conservative estimate of the level of harvesting in the project area in the baseline scenario in the absence of the declaration of the project as an eligible offsets project. The area cleared to facilitate timber harvesting in the baseline scenario must also be calculated using the ratio between the cleared area and logs produced (in cubic metres, m^3) in the prior period and the baseline harvest level (in cubic metres, m^3).

Step 3: Carbon stock changes in the forest carbon pools (live above and below ground biomass and debris), and CH_4 and N_2O emissions associated with post-harvest (slash) burns, in the project and baseline scenarios are calculated using FullCAM in accordance with the FullCAM Guidelines. The modelling must be undertaken using the representative model plots derived in accordance with Step 1, supplemented with additional model plots as necessary that reflect forest clearing events that are not directly related to timber harvesting. Generally, the same representative model plots are required to be used in the baseline and project scenarios, with harvest events (including post-harvest (slash) burns) and forest clearing events undertaken to facilitate harvesting included (in the baseline scenario) and excluded (in the project scenario) as relevant to reflect the nature of the project activities. The main exception to this relates to forest clearing events that are not directly related to timber production, which are modelled in the project scenario but excluded from the baseline scenario.

Step 4: Carbon stock changes in the harvested wood products carbon pool are then calculated. In the baseline scenario, the log inputs to the harvested wood products model are those generated by the baseline FullCAM forest estate model that is used to model carbon stock changes in the forest carbon pools. In the project scenario, the log inputs must be the actual logs harvested over the reporting period. To promote conservatism and avoid crediting ineligible abatement, pulplogs are assumed to be instantly oxidised

following harvest in the project scenario, while they are modelled through their lifecycle in the baseline scenario. Other residue logs (e.g. firewood) are assumed to be instantly oxidised following harvest in both the project and baseline scenarios.

Step 5: In the project scenario, CO_2, CH_4 and N_2O emissions from fossil fuel combustion are then calculated. In the baseline scenario, CO_2, CH_4 and N_2O emissions from fossil fuel combustion are modelled using emission factors (emissions per m^3 of logs harvested) derived from the project scenario.

Step 6: The leakage deduction for the reporting period is calculated as the direct leakage deduction for the reporting period, plus the private native forests leakage deduction for the reporting period, plus the indirect leakage deduction for the reporting period.

Step 7: If the net abatement amount for a reporting period is negative, there are no carbon credits for the reporting period and the negative abatement amount is added to the aggregate negative abatement account and then applied to the next project to report under this determination in the State in which the project is located.

Division 5.2—Calculation of net abatement amount

26 Equation for calculating net abatement amount

(1) The net abatement amount for a reporting period is calculated using the following equation.

$NA_i = (\Delta CS_{p,i} - \Delta CS_{b,i}) + (ES_{b,i} - ES_{p,i}) - LD_i + ANAA_i$	**Equation 1**

where:

NA_i is the net abatement amount for reporting period i (in tonnes CO_2-e).

$\Delta CS_{p,i}$ is the carbon stock change (in tonnes CO_2-e) in included carbon pools in the project scenario over reporting period i, calculated in accordance with Equation 2.

$\Delta CS_{b,i}$ is the carbon stock change (in tonnes CO_2-e) in included carbon pools in the baseline scenario over reporting period i, calculated in accordance with Equation 2.

$ES_{p,i}$ is the emissions (in tonnes CO_2-e) from included sources in the project scenario over reporting period i, calculated in accordance with Equation 4.

$ES_{b,i}$ is the emissions (in tonnes CO_2-e) from included sources in the baseline scenario over reporting period i, calculated in accordance with Equation 4.

LD_i is the leakage deduction (in tonnes CO_2-e) for reporting period i calculated in accordance with Equation 12.

$ANAA_i$ is the aggregate negative abatement amount (in tonnes CO_2-e) in the aggregate negative abatement account at the end of the reporting period (if any), determined in accordance with section 44.

(2) For Equation 1, the project proponent must model the relevant baseline and project scenarios in accordance with this Part.

(3) The calculation of the net abatement amount is subject to the hurdle requirement for eligible carbon abatement under section 45.

Division 5.3— Representative model plots and baseline estate model

27 Development of representative FullCAM model plots and baseline estate model

(1) The project proponent must develop representative FullCAM model plots that simulate harvesting in public native forests in the project area based on the forest types and harvest practices in the 5-year period prior to the end of the last financial year prior to the making of the application for the declaration of the project as an eligible offsets project (the **prior period**).

(2) The representative plots developed under subsection (1) must satisfy each of the following requirements.

(a) Each representative plot must simulate harvesting in 1 hectare of public native forests.

(b) The representative plots must reflect:

(i) the forest types (at the major vegetation group level) in which harvesting occurred; and

(ii) the harvesting practices used to harvest wood from each of the forest types (e.g. clear felling, single tree selection); and

(iii) the average age of the trees at which harvesting occurred in the forest types using each defined combination of harvest practice and forest type,

in the prior period.

(c) One representative plot must be developed for each combination of the characteristics in subparagraphs (b)(i), (ii) and (iii) as follows.

(i) The forest types must be reflected through the number assigned to the maximum live above-ground biomass (represented by the parameter *M* in FullCAM) in the plots and each forest type must be assigned one estimate of *M* only, calculated as the average from the area covered by each forest type in the project area.

(ii) The harvesting practices must be reflected through:

(A) the percentage of the forest affected by the harvest event; and

(B) the proportion of stem biomass assigned to wood products and deadwood in the plots; and

(C) whether there is a post-harvest (slash) burn and the characteristics of the burn (where relevant); and

(D) the simulation of a plant tree event occurring on 1 January in the year immediately following the year of the modelled harvest event.

(iii) The average age at which harvesting occurs must be reflected through the average age of the trees, and the age of the oldest trees, at the time of harvest in the plots and the age of the trees and the age of the oldest trees must be the same in each plot.

(d) Other than as provided for in paragraph (c), the parameters in the representative plots must be the same as those used to simulate harvesting in the project area for the purposes of the National Inventory Report, as at the time of the declaration of the project as an eligible offsets project.

(e) The representative plots must be able to support the development of a prior period FullCAM forest estate model that meets the accuracy requirements in subsection (6).

(f) The representative plots must be developed in accordance with the FullCAM Guidelines.

(3) The project proponent must also develop representative FullCAM model plots that simulate clearing of public native forests to facilitate timber harvesting in the project area in the prior period.

Note: The FullCAM model plots developed for subsection (3) to simulate areas cleared to facilitate timber harvesting are in addition to those developed under subsection (1) to simulate areas subject to harvesting.

(4) The representative plots developed under subsection (3) must satisfy each of the following requirements.

(a) Each representative plot must simulate clearing of 1 hectare of public native forests.

(b) One representative plot must be developed for each forest region in the project area.

(c) The representative plot for a forest region must reflect the average carbon density of the public native forests that were cleared in the region to facilitate harvesting in the prior period, as follows.

(i) The number assigned to the maximum live above-ground biomass (represented by the parameter M in FullCAM) in the plot must be the average across the relevant forest types that were affected by the clearing in the prior period.

(ii) The clearing must be assumed to occur when the live above-ground biomass in the plot reaches 75% of its maximum, in the second rotation of a harvesting cycle that occurs at the same age.

(d) The representative plot for a forest region must reflect the following assumptions.

(i) That the entire modelled area is cleared.

(ii) That all cleared biomass goes to deadwood (and that no biomass is recovered for timber products).

(iii) That there is no planting or regeneration after the clearing event.

(e) Other than as provided in paragraphs (c) and (d), the parameters in the representative plots must be the same as those used to simulate clearing in the project area for the purposes of the National Inventory Report, as at the time of the declaration of the project as an eligible offsets project.

(f) The representative plots must be developed in accordance with the FullCAM Guidelines.

(5) A FullCAM forest estate model (the ***prior period FullCAM forest estate model***) must be developed in accordance with the FullCAM Guidelines using only the representative plots to estimate the changes in forest carbon stocks, and emissions of CH_4 and N_2O from post-harvest (slash) burns, from the timber harvesting (and from clearing to facilitate timber harvesting) that occurred in the project area in the prior period.

(6) The prior period FullCAM forest estate model's estimates of the total net harvested area (in hectares) in, and logs produced (in cubic metres (m^3) of logs produced) from, the project area for the prior period must be within ±5% of the actual values for that period.

(7) The project proponent must publish all necessary information, including full details of the method and all relevant data, to enable third parties to recreate the representative FullCAM model plots developed under subsections (1) and (3) and the prior period FullCAM forest estate model.

Division 5.4—Baseline harvest levels

28 Calculating baseline harvest levels, in volume of wood harvested

(1) The harvest level in the baseline scenario (in cubic metres (m^3) of logs produced) for the reporting period is the latest modified sustainable yield for the period calculated as follows (the ***modified sustainable yield***).

(a) If there is a sufficient correlation for the project between the sustainable yield and log production during the baseline period (defined as a coefficient of determination (R^2) equal to or greater than 0.7) – the modified sustainable yield is the unmodified sustainable yield that applies to the reporting period, calculated in accordance with subsection (2), multiplied by the average log production to sustainable yield ratio over the baseline period.

(b) If there is not a sufficient correlation for the project between the sustainable yield and log production during the baseline period (defined as a coefficient of determination (R^2) less than 0.7) – the modified sustainable yield is either:

(i) if the log production to sustainable yield ratio over the baseline period was equal to or greater than 0.8 in all years – the unmodified sustainable yield that applies to the reporting period, calculated in accordance with subsection (2), multiplied by 0.8; or

(ii) if the log production to sustainable yield ratio over the baseline period was less than 0.8 in any year – the unmodified sustainable yield that applies to the reporting period, calculated in accordance with subsection (2), multiplied by the lower of the average log production to sustainable yield ratio over the baseline period or 0.6.

(2) For subsection (1), the unmodified sustainable yield must be calculated as follows.

(a) Where the project area is covered by a regional forest agreement under the *Regional Forest Agreements Act 2002*, subject to paragraphs (c)-(g), the unmodified sustainable yield must be calculated in accordance with the method used to estimate the sustainable yield for the purposes of the most recent five-year sustainable yield review under the agreement.

(b) Where the project area is not covered by a regional forest agreement under the *Regional Forest Agreements Act 2002*, subject to paragraphs (c)-(g), the unmodified sustainable yield must be calculated in accordance with a method that is consistent with the method used to calculate the sustainable yield in an area covered by a current regional forest agreement. The method used for the area covered by a current regional forest agreement must be that used for the area in the most recent five-year sustainable yield review under the applicable regional forest agreement.

(c) The unmodified sustainable yield must:

(i) include sawlogs (high and low quality), pulplogs, veneer logs (including peelers), poles, piles and girders (where they are, or would otherwise be, produced from the forests in the project area); and

(ii) exclude residues such as firewood.

Note: All wood extracted from relevant forests, including residues, must be included when calculating changes in the carbon stocks in the harvested wood products carbon pool, and calculating the direct leakage deduction and the private native forests leakage deduction.

(d) The area available for harvest that is used to calculate the unmodified sustainable yield must:

(i) account for laws of the Commonwealth or the relevant State relating to the ability to harvest timber in the project area that were in force when the project was declared to be an eligible offsets project (even if the relevant laws are subsequently repealed or amended);

(ii) account for operational factors that affect the ability to harvest timber in specific parts of the project area, including the slope and accessibility of the land; and

(iii) ignore actions taken after the declaration of the project as an eligible offsets project to stop or reduce timber harvesting for the purposes of the project.

(e) Where the method that is used to calculate the unmodified sustainable yield provides for an allowance to be applied to account for uncertainty, the allowance must not increase the sustainable yield by more than 10%.

(f) The unmodified sustainable yield derived in accordance with the applicable method must constitute a conservative estimate (based on continued use of the forests for commercial forestry purposes) of the long-term wood yield from the forests in the project area that could be maintained in perpetuity under the forest management strategies and sustainable use objectives that applied immediately prior to the declaration of the project as an eligible offsets project. For these purposes, conservative means the estimate is more likely to under-estimate than over-estimate the applicable long-term wood yield, accounting for the application of any uncertainty allowance in accordance with paragraph (e).

(g) If the unmodified sustainable yield that is calculated in accordance with paragraphs (a) to (f) is higher than the sustainable yield published by a relevant government agency in the State (as referred to in section 14) for the reporting period, the sustainable yield so published is the unmodified sustainable yield for the purposes of subsection (1).

(3) For calculating the modified sustainable yield, the ***baseline period***:

(a) is the 10-year period prior to the end of the last financial year before the making of the application for the declaration of the project as an eligible offsets project; but

(b) if, during that 10-year period, more than 25% of the net harvestable area in the project area is affected by wildfire in a particular financial year, that financial year and the 2 subsequent financial years may be excluded from the baseline period.

Note: For paragraph (b), the net harvestable area is calculated at the time of the wildfire.

(4) The modified and unmodified sustainable yield must be calculated:

(a) prior to the end of the first reporting period (the ***initial modified sustainable yield***); and

(b) within the 6-month period commencing on the 5th and 10th anniversary of the declaration of the project as an eligible offsets project (the ***revised modified sustainable yield***); and

(c) within 6 months of a major disturbance event (the ***revised modified sustainable yield***).

Note: When calculating a revised modified sustainable yield, the log production to sustainable yield correlations and ratios must be taken from the baseline period and not the 10-year period prior to the date of the re-calculation.

(5) Initial and revised modified sustainable yields must be verified by an independent qualified assessor contracted by the Regulator.

(6) The project proponent is required to re-imburse the Regulator for the costs of contracting an independent qualified assessor to verify initial or revised modified sustainable yields.

(7) The project proponent must publish all necessary information, including full details of the method and all relevant data, to enable third parties to replicate the calculations used to derive the modified and unmodified sustainable yields.

29 Calculating baseline harvest levels, in net harvested area

The volume of wood harvested in the baseline scenario for the reporting period calculated under section 28 must be converted to a net harvested area in the baseline scenario (in hectares) by dividing the estimate of logs produced (in cubic metres, m^3) by the area-weighted average log yield (in m^3 per hectare) from the prior period FullCAM forest estate model.

30 Calculating area cleared to facilitate harvesting in baseline scenario

The area cleared to facilitate timber harvesting in the baseline scenario (in hectares) for the reporting period must be calculated by:

(a) dividing the area cleared to facilitate timber harvesting in the project area in the prior period by the logs produced (in cubic metres, m^3) in the project area in the prior period; and

(a) multiplying the ratio from paragraph (a) by the harvest level in the baseline scenario for the reporting period (in cubic metres (m^3) of logs produced), as calculated under section 28.

Division 5.5—Carbon stock change

31 Calculating carbon stock change in included carbon pools

For Equation 1, the carbon stock change (in tonnes CO_2-e) in the project area in reporting period i in either the project scenario ($\Delta CS_{p,i}$) or the baseline scenario ($\Delta CS_{b,i}$) is calculated using the following equation:

$\Delta CS_{x,i} = \frac{44}{12} \times (CS_{x,i} - CS_{x,i-1})$	**Equation 2**

where:

$\Delta CS_{x,i}$ is the carbon stock change (in tonnes CO_2-e) in the included carbon pools in reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant).

$CS_{x,i}$ is the carbon stock in included carbon pools (in tonnes of carbon) at the end of reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant).

$CS_{x,i-1}$ is either:

(a) if reporting period i is the first reporting period – the carbon stock in included carbon pools (in tonnes of carbon) on the day immediately prior to the start of reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant); or

(b) if reporting period i is not the first reporting period – the carbon stock in included carbon pools (in tonnes of carbon) at the end of the reporting period that preceded reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant).

32 Calculating included carbon stocks

(1) For Equation 2, the carbon stock in included carbon pools at the end of reporting period i is calculated using the following equation:

$CS_{x,i} = ((CS_{t,x,i} + CS_{d,x,i}) \times A_{x,i}) + CS_{hwps,x,i} + CS_{hwpl,x,i}$	**Equation 3**

where:

$CS_{x,i}$ is the carbon stock in included carbon pools (in tonnes of carbon) at the end of reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant).

$CS_{t,x,i}$ is the carbon mass of trees (in tonnes of carbon per hectare) at the end of reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant), determined in accordance with section 34.

$CS_{d,x,i}$ is the carbon mass of forest debris (in tonnes of carbon per hectare) at the end of the reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant), determined in accordance with section 34.

$A_{x,i}$ is the area subject to relevant modelled events specified in section 33 in reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant).

$CS_{hwps,x,i}$ is the carbon mass of harvested wood products from the project area (in tonnes of carbon) that are in service at the end of reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant), determined in accordance with section 35.

$CS_{hwpl,x,i}$ is the carbon mass of harvested wood products from the project area (in tonnes of carbon) that are in landfills at the end of reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant), determined in accordance with section 35.

(2) If reporting period i is the first reporting period, the carbon stock in included carbon pools (in tonnes of carbon) on the day immediately prior to the start of reporting period i must be calculated in accordance with subsection (1), only treating the simulation period prior to the declaration of the project as an eligible offsets project as a reporting period for these purposes.

33 Modelled events for calculating carbon stock change

(1) For Equations 2 and 3, in calculating the carbon stock change in carbon pools in the baseline scenario, the following events must be modelled.

(a) Timber harvesting (including post-harvest (slash) burns).

(b) Clearing of public native forests to facilitate timber harvesting.

(2) For Equations 2 and 3, in calculating the carbon stock change in carbon pools in the project scenario, the following events must be modelled.

(a) Avoided timber harvesting.

(b) Avoided clearing of public native forests to facilitate timber harvest.

(c) Other clearing of public native forests, including for land management roads and fire trails (except where the clearing involves the re-clearing of the roads or trails that were cleared in the 10 years prior to the date the application was made for the declaration of the project as an eligible offsets project).

34 Estimation of carbon stocks in trees and forest debris

(1) For Equation 3, the carbon mass of trees and forest debris at the end of the reporting period in the project and baseline scenarios must be determined using FullCAM in accordance with the FullCAM Guidelines.

Note: If reporting period i is the first reporting period, the simulation period prior to the declaration of the project as an eligible offsets project is treated as a reporting period for these purposes.

(2) In the baseline scenario, the carbon mass of trees and forest debris at the end of the first reporting period must be estimated as follows.

(a) The proportion of the total net harvested area for the prior period that was allocated to each of the representative model plots developed under subsection 27(1) to simulate harvesting in the prior period FullCAM forest estate model must be calculated.

Note: The proportion calculated for a representative model plot must reflect the proportion of the total net harvested area for the entire prior period that was allocated to the plot in the model.

(b) The net harvested area in the baseline scenario (in hectares) over the reporting period must be calculated by:

(i) dividing the net harvested area in the baseline scenario for each financial year covered by the reporting period by 12 (to derive an average baseline harvested area for each month); and

(ii) summing the average baseline harvested area for each month in the reporting period.

(c) The modelled baseline harvested area for the reporting period must be calculated by subtracting the net harvested area in the reporting period (in hectares) from the net harvested area in the baseline scenario (in hectares) over the reporting period from paragraph (b).

(d) The modelled baseline harvested area (in hectares) from paragraph (c) must be allocated to the representative model plots developed under subsection 27(1) by multiplying the proportion from paragraph (a) for each plot by the modelled baseline harvested area for the reporting period.

(e) Clearing to facilitate timber harvesting in the baseline scenario for the reporting period must be modelled as follows.

(i) The modelled baseline cleared area for the reporting period must be calculated by:

(A) multiplying the logs produced in the project area in the reporting period (in cubic metres, m^3) by the ratio from subsection 30(a); and

(B) subtracting the result from (A) from the area cleared to facilitate timber harvesting in the baseline scenario (in hectares) from section 30.

(ii) The modelled baseline cleared area from subparagraph (i) must be allocated to the representative model plots developed under subsection 27(3) to simulate clearing in proportion to the volume of wood harvested in the baseline scenario in each forest region in the project area.

(f) A FullCAM forest estate model (the ***baseline FullCAM forest estate model***) must be developed that meets the following specifications.

(i) Harvesting in the project area must be simulated using the representative model plots developed under subsection 27(1) and the allocated modelled baseline harvested area from paragraph (d) (with harvest events scheduled to occur on the day after the date of the declaration of the project as an eligible offsets project).

(ii) Clearing to facilitate timber harvesting must be simulated using the representative model plots developed under subsection 27(3) and the allocated modelled baseline cleared area from subparagraph (e)(ii) (with clearing events scheduled to occur on the day after the date of the declaration of the project as an eligible offsets project).

(iii) The model simulation must start 12 months prior to the date of the declaration of the project as an eligible offsets project.

(iv) The representative model plots from paragraphs (i) and (ii) must be added at the start of the simulation.

(g) The carbon mass of trees and forest debris in the baseline scenario at the end of the reporting period must be estimated using the baseline FullCAM forest estate model from paragraph (f).

(3) In the baseline scenario, the carbon mass of trees and forest debris at the end of subsequent reporting periods must be estimated as follows.

(a) The modelled baseline harvested area for the reporting period must be calculated in accordance with the procedures in paragraphs (2)(b) and (c).

(b) The modelled baseline harvested area must be allocated to the representative model plots developed under subsection 27(1) to simulate harvesting in accordance with the procedures in paragraph (2)(d).

(c) The modelled baseline cleared area to facilitate timber harvesting for the reporting period must be calculated in accordance with the procedures in subparagraph (2)(e)(i).

(d) The modelled baseline cleared area must be allocated to the representative model plots developed under subsection 27(3) to simulate clearing in accordance with the procedures in subparagraph (2)(e)(ii).

(e) The baseline FullCAM forest estate model from the previous reporting period must be modified by adding the new plots and allocated modelled baseline harvested and cleared areas from paragraphs (b) and (d). The plots must be added 12 months prior to the date of the start of the reporting period, with modelled events scheduled to occur the day after the start of the reporting period.

(f) The carbon mass of trees and forest debris in the baseline scenario at the end of the reporting period must be estimated using the modified baseline FullCAM forest estate model from paragraph (e).

(4) In the project scenario, the carbon mass of trees and forest debris at the end of the first reporting period must be estimated as follows.

(a) The modelled avoided harvest area (in hectares) for the reporting period must be calculated in accordance with the procedures in paragraphs (2)(b) and (c).

(b) The modelled avoided harvest area from paragraph (a) must be allocated to the representative model plots developed under subsection 27(1) to simulate harvesting by multiplying the proportion from paragraph (2)(a) for each plot by the modelled avoided harvest area for the reporting period.

(c) The harvest events must be removed from the representative model plots developed under subsection 27(1) to simulate harvesting.

(d) The modelled avoided cleared area to facilitate timber harvesting (in hectares) for the reporting period must be the same as the modelled baseline cleared area from paragraph (2)(e)(i).

(e) The modelled avoided cleared area from paragraph (d) must be allocated to the representative model plots developed under subsection 27(3) to simulate clearing in proportion to the volume of wood harvested in the baseline scenario in each forest region in the project area.

(f) The clearing events must be removed from the representative model plots developed under subsection 27(3) to simulate clearing.

(g) Clearing of public native forest in the reporting period (other than clearing for timber harvesting or to facilitate timber harvesting) must be modelled as follows.

(i) The area cleared must be spatially identified in accordance with the Mapping Guidelines.

(ii) The identified cleared areas must be allocated to representative FullCAM model plots developed in accordance with the FullCAM Guidelines that simulate the clearing events.

(h) A FullCAM forest estate model (the ***project FullCAM forest estate model***) must be developed that meets the following specifications.

(i) Avoided timber harvesting events must be modelled using the modified representative model plots from paragraph (c) and the allocated modelled avoided harvest area from paragraph (b).

(ii) Avoided clearing (to facilitate timber harvesting) events must be modelled using the modified representative model plots from paragraph (f) and the allocated modelled avoided cleared area from paragraph (e).

(iii) Clearing events must be modelled using the representative cleared area model plots and allocated areas from paragraph (g) (with the clearing events scheduled to occur on the day after the date of the declaration of the project as an eligible offsets project).

(iv) The model simulation must start 12 months prior to the date of the declaration of the project as an eligible offsets project.

(v) The representative model plots from paragraphs (i), (ii) and (iii) must be added at the start of the simulation.

(i) The carbon mass of trees and forest debris in the project scenario at the end of the reporting period must be estimated using the project FullCAM forest estate model.

(5) In the project scenario, the carbon mass of trees and forest debris at the end of subsequent reporting periods must be estimated as follows.

(a) The modelled avoided harvest area for the reporting period must be calculated in accordance with the procedures in paragraphs (2)(b) and (c).

(b) The modelled avoided harvest area must be allocated to the representative model plots developed under subsection 27(1) to simulate harvesting by multiplying the proportion from paragraph (2)(a) for each plot by the modelled avoided harvest area for the reporting period.

(c) The harvest events must be removed from the representative model plots developed under subsection 27(1) to simulate harvesting.

(d) The modelled avoided cleared area to facilitate timber harvesting (in hectares) for the reporting period must be calculated in accordance with the procedures in paragraph (2)(e)(i).

(e) The modelled avoided cleared area from paragraph (d) must be allocated to the representative model plots developed under subsection 27(3) to simulate clearing in proportion to the volume of wood harvested in the baseline scenario in each forest region in the project area.

(f) The clearing events must be removed from the representative model plots developed under subsection 27(3) to simulate clearing.

(g) Clearing of public native forest in the reporting period (other than clearing for timber harvesting or to facilitate timber harvesting) must be modelled as follows.

(i) The area cleared must be spatially identified in accordance with the Mapping Guidelines.

(ii) The identified cleared areas must be allocated to representative FullCAM model plots developed in accordance with the FullCAM Guidelines that simulate the clearing events.

(h) The project FullCAM forest estate model from the previous reporting period must be modified by adding the new plots and modelled avoided harvest areas from

paragraphs (b) and (c), the new plots and modelled avoided cleared areas from paragraphs (e) and (f) and the new plots and identified cleared areas from paragraph (g). The plots must be added 12 months prior to the date of the start of the reporting period, with modelled clearing events scheduled to occur the day after the start of the reporting period.

(i) The carbon mass of trees and forest debris in the project scenario at the end of the reporting period must be calculated using the modified project FullCAM forest estate model.

35 Estimation of carbon stocks in harvested wood products

(1) For Equation 3, the carbon mass of harvested wood products from the project area that are in service or in landfills at the end of the reporting period in the baseline and project scenarios must be determined using FullCAM.

(2) In the baseline scenario, the volume of wood harvested in a reporting period that is inputted to FullCAM must be equal to the baseline harvest levels, in cubic metres (m^3) of logs produced, for the reporting period, calculated by:

(a) dividing the baseline harvest level for each financial year covered by the reporting period by 12 (to derive a monthly baseline harvest level); and

(b) summing the baseline harvest level for each month in the reporting period.

(3) In the project scenario, the volume of wood harvested in a reporting period that is inputted to FullCAM must be the actual logs harvested over the reporting period, minus pulplogs and other residue logs (e.g. firewood).

(4) Modelling of the carbon mass of harvested wood products in service and in landfills must be carried out in accordance with the FullCAM Guidelines.

Division 5.6—Emissions from included sources

36 Emissions from included sources

For Equation 1, emissions from included sources (in tonnes CO_2-e) in reporting period i, in either the project scenario or baseline scenario, are calculated using the following equation.

$ES_{x,i} = ESB_{b,i} + EFF_{x,i}$	**Equation 4**

where:

$ES_{x,i}$ is the emissions from included sources (in tonnes CO_2-e) in reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant).

$ESB_{b,i}$ is the emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in reporting period i in the baseline scenario, calculated in accordance with Equation 5.

$EFF_{x,i}$ is the emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations over reporting period i in the project scenario (x = p) or baseline scenario (x = b) (as relevant), calculated in accordance with Equation 8 or 10.

37 Calculating emissions from post-harvest (slash) burns in the baseline scenario

(1) The emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in reporting period i in the baseline scenario are calculated using the following equation.

$ESB_{b,i} = ESB_{b,i,CH4} + ESB_{b,i,N2O}$	**Equation 5**

where:

$ESB_{b,i}$ is the emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in reporting period i in the baseline scenario.

$ESB_{i,CH4}$ is the emissions of CH_4 (in tonnes CO_2-e) from post-harvest (slash) burns in reporting period i in the baseline scenario, calculated in accordance with Equation 6.

$ESB_{i,N2O}$ is the emissions of N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in reporting period i in the baseline scenario, calculated in accordance with Equation 7.

(2) For subsection (1), emissions of CH_4 (in tonnes CO_2-e) from post-harvest (slash) burns are calculated using the following equation.

$ESB_{b,i,CH4} = GWP_{CH4} \times \Sigma_t (ESB_{b,i,CH4,t} \text{ x } A_{b,i,t})$	**Equation 6**

where:

$ESB_{b,i,CH4}$ is the emissions of CH_4 (in tonnes CO_2-e) from post-harvest (slash) burns over reporting period i in the baseline scenario.

GWP_{CH4} is the global warming potential of methane as specified in the *National Greenhouse and Energy Reporting Regulations 2008* at the reporting date.

$ESB_{b,i,CH4,t}$ is the mass of CH_4 emitted (in tonnes per hectare) during reporting period i due to post-harvest (slash) burns in representative forest plot type t in the baseline scenario.

$A_{b,i,t}$ is the area (in hectares) of representative forest plot type t that is subject to post-harvest (slash) burns in reporting period i in the baseline scenario, determined in accordance with sections 27 and 34(2).

(3) For subsection (1), emissions of N_2O (in tonnes CO_2-e) from post-harvest (slash) burns are calculated using the following equation.

$ESB_{b,i,N2O} = GWP_{N2O} \times \Sigma_t (ESB_{b,i,N2O,t} \text{ x } A_{b,i,t})$	**Equation 7**

where:

$ESB_{i,N2O}$ is the emissions of N_2O (in tonnes CO_2-e) from post-harvest (slash) burns over reporting period i in the baseline scenario.

GWP_{N2O} is the global warming potential of nitrous oxide as specified in the *National Greenhouse and Energy Reporting Regulations 2008* at the reporting date.

$ESB_{b,i,N2O,t}$ is the mass of N_2O emitted (in tonnes per hectare) during reporting period i due to post-harvest (slash) burns in representative forest plot type t in the baseline scenario.

$A_{b,i,t}$ is the area (in hectares) of representative forest plot type t that is subject to post-harvest (slash) burns in reporting period i in the baseline scenario, determined in accordance with sections 27 and 34(2).

(4) For subsections (2) and (3), emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in the baseline scenario must be determined using FullCAM in accordance with the FullCAM Guidelines and the modelling procedures in section 34, including in relation to the modelled baseline harvested area.

38 Calculating emissions from combustion of fossil fuels in harvesting and haulage operations in project scenario

(1) Emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations in reporting period i in the project scenario are calculated using the following equation.

$EFF_{p,i} = \Sigma_f \Sigma_k E_{f,k,i}$	**Equation 8**

where:

$EFF_{p,i}$ is the emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations over reporting period i in the project scenario.

f is a fossil fuel that was combusted during the reporting period in relation to the timber harvesting and hauling operations in the project area.

k is a greenhouse gas emitted from the combustion of the fossil fuel, being CO_2, CH_4 or N_2O.

$E_{f,k,i}$ is the emissions of greenhouse gas k (in tonnes CO_2-e) from the combustion of fuel type f in reporting period i, calculated in accordance with Equation 9.

(2) For subsection (1), the fuel emissions for fuel type f and greenhouse gas k (in tonnes CO_2-e) in reporting period i is calculated using the following equation.

$E_{f,k,i} = \frac{Q_{f,i} \times EC_f \times EF_{f,k}}{1000}$	**Equation 9**

where:

$E_{f,k,i}$ is the emissions of greenhouse gas k (in tonnes CO_2-e) from the combustion of fuel type f in reporting period i.

$Q_{f,i}$ is the quantity of fuel type f combusted in reporting period i in relation to the timber harvesting and hauling operations in the project area (in kilolitres).

EC_f is the energy content factor of fuel type f, as prescribed in Schedule 1 of the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (in gigajoules per kilolitre).

$EF_{f,k}$ is the emission factor for fuel type f and greenhouse gas k, as prescribed in Schedule 1 to the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (in kilograms CO_2-e per gigajoule).

39 Calculating emissions from combustion of fossil fuels in harvesting and haulage operations in baseline scenario

(1) If the logs harvested in the project area in reporting period i are greater than zero, emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations in reporting period i in the baseline scenario must be calculated using the following equation.

$EFF_{b,i} = \frac{EFF_{p,i}}{LH_{p,i}} \times BHL_{b,i}$	**Equation 10**

where:

$EFF_{b,i}$ is the emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations in reporting period i in the baseline scenario.

$EFF_{p,i}$ is the emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations over reporting period i in the project scenario, calculated in accordance with Equations 8 and 9.

$LH_{p,i}$ is the logs harvested (in cubic metres, m^3) in reporting period i in the project scenario.

$BHL_{b,i}$ is the baseline harvest level (in cubic metres, m^3) in reporting period i, calculated in accordance with Division 5.4.

(2) If no logs are harvested in the project area in reporting period i, emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations in reporting period i in the baseline scenario must calculated using the following equation.

$EFF_{b,i} = \frac{EFF_{pp,i}}{LH_{pp,i}} \times 0.9 \times BHL_{b,i}$	**Equation 11**

where:

$EFF_{b,i}$ is the emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations in reporting period i in the baseline scenario.

$EFF_{pp,i}$ is the emissions of CO_2, CH_4 and N_2O (in tonnes CO_2-e) from the combustion of fossil fuels associated with timber harvesting and haulage operations over the prior period, calculated in accordance with Equations 8 and 9, substituting the prior period for the reporting period where relevant.

$LH_{pp,i}$ is the logs harvested (in cubic metres, m^3) in the project area over the prior period.

$BHL_{b,i}$ is the baseline harvest level (in cubic metres, m^3) in reporting period i, calculated in accordance with Division 5.4.

Division 5.7—Leakage deductions

40 Leakage deduction for reporting period (LD_i)

For Equation 1, the leakage deduction for reporting period i is calculated using the following equation.

$LD_i = DLD_i + PNFLD_i + ILD_i$	**Equation 12**

where:

LD_i is the leakage deduction (in tonnes CO_2-e) for reporting period i.

DLD_i is the direct leakage deduction (in tonnes CO_2-e) for reporting period i (if applicable) calculated in accordance with Equation 15.

$PNFLD_i$ is the private native forests leakage deduction (in tonnes CO_2-e) for reporting period i (if applicable) calculated in accordance with Equation 17.

ILD_i is the indirect leakage deduction (in tonnes CO_2-e) for reporting period i calculated in accordance with Equation 18.

41 Direct leakage deduction (DLD_i)

(1) Subject to subsections (7) and (8), this section applies to the public native forests that are designated for commercial forestry use in the State in which the eligible offsets project is located, other than those in the project area for the project or in the project area for another eligible offsets project that was registered under this determination prior the start of the reporting period.

(2) A direct leakage deduction applies in calculating the leakage deduction for a reporting period if there is a direct leakage exceedance.

(3) There is a direct leakage exceedance for the purposes of subsection (2) if the exceedance volume for the relevant public native forests for the reporting period is greater than zero.

(4) For the purposes of this section, the exceedance volume (in cubic metres, m^3) for relevant public native forests must be calculated in accordance with the following equation.

$EV_i = \max((WV_i - DLBHL_i) \times AF_i, 0)$	**Equation 13**

Where:

EV_i is the exceedance volume (in cubic metres, m^3) for reporting period i.

WV_i is the wood volume (in cubic metres, m^3) extracted from the relevant public native forests in reporting period i.

$DLBHL_i$ is the direct leakage baseline harvest level (in cubic metres, m^3) for reporting period i.

AF_i is the project allocation factor for reporting period i calculated under subsection (6).

(5) Subject to subsections (7) and (8), the direct leakage baseline harvest level ($DLBHL_i$) for reporting period i is the lower of the following.

(a) The average volume of wood (in cubic metres, m^3 per month) extracted from the public native forests over the baseline period, as determined in accordance with Division 5.4, multiplied by the number of months in the reporting period.

(b) The modified sustainable yield for the public native forests for the reporting period, as determined in accordance with Division 5.4.

Note: For paragraph (3)(a), Division 5.4 contains the rules regarding the determination of the baseline period for the relevant public native forests. For paragraph (3)(b), Division 5.4 contains the rules regarding the determination of the modified sustainable yield for the relevant public native forests.

(6) The project allocation factor for reporting period i (AF_i) represents the proportion of the exceedance volume for the relevant forests (if any) that is attributable to each eligible offset project registered under this determination in the State in which the eligible offsets project is located and is calculated in accordance with the following equation.

$AF_i = \frac{V_j \times M_i}{\sum_{k=1}^{n} V_k \times M_k}$	**Equation 14**

Where:

AF_i is the project allocation factor (AF) for reporting period i.

V_j is the rate of wood extracted (in cubic metres per month) from the public native forests in the project area in the 10-year period before the end of the last financial year before the application was made under the Act for the declaration of the first project in the State as an eligible offsets project under this determination.

M_i is the number of months in reporting period i.

V_k is the rate of wood extracted (in cubic metres per month) from the public native forests in projects k = 1 to n in the State that are registered under this determination in the 10-year period before the end of the last financial year before the application was made under the Act for the declaration of the first project in the State as an eligible offsets project under this determination.

M_k is the number of months in reporting period i that the public native forests in project k were included in an eligible offsets project registered under this determination.

(7) The following rules apply if public native forests covered by this section are included in an eligible offsets project under this determination during the reporting period.

(a) The direct leakage baseline harvest level and exceedance volume must be calculated separately for the periods before and after the date the relevant public native forests were included in the eligible offsets project.

(b) For the period before this date, the relevant public native forests must be included in the calculation of the direct leakage baseline harvest level and the volume of wood extracted from these forests in the reporting period must be included in the calculation of the exceedance volume.

(c) For the period after this date, the relevant public native forests and the volume of wood extracted from these forests must be excluded from the calculation of the direct leakage baseline harvest level and exceedance volume.

(d) The exceedance volume for the reporting period must be calculated as the sum of the amounts calculated for the relevant periods.

(8) The following rules apply if new areas of public native forest are designated for commercial forestry use after the first eligible offsets project is declared under this determination in the State in which the eligible offsets project is located.

(a) The direct leakage baseline harvest level and exceedance volume must be calculated separately for the pre-existing public native forest areas and the new areas.

(b) For the pre-existing public native forest areas, the relevant public native forests must be included in the calculation of the direct leakage baseline harvest level and the volume of wood extracted from these forests in the reporting period must be included in the calculation of the exceedance volume.

(c) For new public native forest areas, the relevant public native forests must be excluded from the calculation of the direct leakage baseline harvest level, but the volume of wood extracted from the forests in the reporting period must be included in the calculation of the exceedance volume.

(d) The exceedance volume for the reporting period must be calculated as the sum of the amounts calculated for the pre-existing and new public native forests.

(9) If a direct leakage deduction applies for a reporting period, the direct leakage deduction (DLD_i) must be calculated as follows.

(a) A modelled harvested area must be derived by dividing the exceedance volume (calculated under subsection (4)) by the area-weighted average log yield (in m^3 per hectare) from the prior period FullCAM forest estate model developed under section 27.

(b) The direct leakage deduction (DLDi) must be calculated as the difference between the net emissions (in tonnes CO_2-e) from harvesting and not harvesting the modelled harvested area (derived under paragraph (b)) over a 5-year simulation period and is calculated using the following equation.

$DLD_i = (\Delta CS_n - \Delta CS_h) - (ES_n - ES_h)$	**Equation 15**

where:

DLD_i is the direct leakage deduction for reporting period i.

ΔCS_n is the carbon stock change (in tonnes CO_2-e) in forest carbon pools in the no-harvest scenario over the 5-year simulation period, calculated in accordance with Equation 2.

ΔCS_h is the carbon stock change (in tonnes CO_2-e) in forest carbon pools in the harvest scenario over the 5-year simulation period, calculated in accordance with Equation 2.

ES_n is the emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in the no harvest scenario over the 5-year simulation period, calculated in accordance with Equation 5.

ES_h is the emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in the harvest scenario over the 5-year simulation period, calculated in accordance with Equation 5.

(c) In calculating ΔCS_n, ΔCS_h, ES_n and ES_h in Equation 15:

(i) the carbon mass of trees and forest debris in the harvest and no-harvest scenarios must be modelled using FullCAM in accordance with section 34; and

(ii) timber harvesting and post-harvest (slash) burns are the only events that are to be modelled in the harvesting scenario and those events must be removed in the modelling for the corresponding no-harvest scenario (no other events are to be modelled); and

(iii) references to the baseline and project scenarios in Equations 2, 3, 4, 5, 6 and 7, and section 34, must be taken to mean the harvest (baseline) and no harvest (project) scenarios respectively; and

(iv) references to the reporting period in Equations 2, 3, 4, 5, 6 and 7, and section 34, must be taken to mean the 5-year simulation period.

42 Private native forests leakage deduction ($PNFLD_i$)

(1) This section applies to the native forests in the State in which the eligible offsets project is located (other than public native forests) that may be used for the purposes of obtaining timber for sale (private native forests).

(2) A private native forests leakage deduction applies in calculating the leakage deduction for a reporting period if there is an indirect leakage exceedance.

(3) There is an indirect leakage exceedance for the purposes of subsection (2) if the exceedance volume from the relevant private native forests for the reporting period is greater than zero.

(4) For the purposes of this section, the exceedance volume (in cubic metres, m^3) for relevant private native forests must be calculated in accordance with the following equation.

$EVPNF_i = \max((WV_i - PNFLBHL_i) \times AF_i, 0)$	**Equation 16**

Where:

$EVPNF_i$ is the exceedance volume (in cubic metres, m^3) for relevant private native forests for reporting period i.

WV_i is the wood volume (in cubic metres, m^3) extracted from the relevant private native forests in reporting period i.

$PNFLBHL_i$ is the private native forests leakage baseline harvest level (in cubic metres, m^3) for reporting period i.

AF_i is the project allocation factor for the reporting period i calculated under subsection (9).

(5) The private native forests leakage baseline harvest level ($PNFLBHL_i$) is the average volume of wood (in cubic metres, m^3 per month) extracted from the relevant private native forests over the 4-year period before the end of the last financial year before the application was made under the Act for the declaration of the first project in the State as an eligible offsets project under this determination, multiplied by the number of months in the reporting period.

(6) In determining the private native forests leakage baseline harvest level under subsection (5), the average volume of wood (in cubic metres, m^3 per month) extracted from the relevant private native forests over the 4-year period must be estimated using:

(a) the average of:

(i) the volume derived by subtracting the estimate of logs produced (in cubic metres, m^3) from public native forests in the State in which the eligible offsets project is located over the period (published by the relevant State government agency) from the estimate of logs produced (in cubic metres, m^3) from all native forests in the State over the period (published by the Australian Bureau of Agricultural and Resource Economics and Sciences in the most recent version of the Australian Forest and Wood Product Statistics or any Australian Government publication that replaces the Australian Forest and Wood Product Statistics series); and

(ii) the amount reported by the government agency responsible for the regulation of private native forestry in the State as the volume of logs harvested (in cubic metres, m^3) from private native forests over the period; or

(b) if the government agency responsible for the regulation of private native forestry in the State does not have a reported volume of logs harvested (in cubic metres, m^3) from private native forests over the period, the volume derived in accordance with the method described in paragraph (a)(i).

(7) The volume of wood extracted from the relevant private native forests (WV_i) in the reporting period for the purposes of subsection (4) must be the higher of:

(a) the volume derived by subtracting the estimate of logs produced (in cubic metres, m^3) from public native forests in the State in which the eligible offsets project is located over the reporting period (published by the relevant State government agency) from the estimate of logs produced (in cubic metres, m^3) from all native forests in the State over the reporting period (published by the Australian Bureau of Agricultural and Resource Economics and Sciences in the most recent version of the Australian Forest and Wood Product Statistics or any Australian Government publication that replaces the Australian Forest and Wood Product Statistics series) over the period; and

(b) the amount reported by the government agency responsible for the regulation of private native forestry in the State as the volume of logs harvested (in cubic metres, m^3) from the forests over the reporting period (if any).

(8) For the purposes of subsection (7), where the reporting period does not correspond to the period over which the data are reported in the relevant government reports, the volume of wood extracted from the private native forests in the reporting period must be derived by dividing the data reported for the financial or calendar years that overlap the reporting period by the number of months in the relevant years and then multiplying the monthly average by the number of months in the reporting period.

(9) The project allocation factor for reporting period i (AF_i) represents the proportion of the exceedance volume for relevant private native forests (if any) that is attributable to each eligible offset project registered under this determination in the State in which the eligible offsets project is located and is calculated in accordance with Equation 14 in subsection 41(6).

(10) If a private native forests leakage deduction applies for a reporting period, the private native forests leakage deduction ($PNFLD_i$), must be calculated as follows.

(a) A modelled harvested area must be derived by dividing the exceedance volume (calculated under subsection (4)) by the area-weighted average log yield (in m^3 per hectare) from the prior period FullCAM forest estate model under section 27.

(b) The private native forests leakage deduction ($PNFLD_i$) must be calculated as the difference between the net emissions (in tonnes CO_2-e) from harvesting and not harvesting the modelled harvested area (derived under paragraph (a)) over a 5-year simulation period and is calculated using the following equation.

$PNFLD_i = (\Delta CS_n - \Delta CS_h) - (ES_n - ES_h)$	**Equation 17**

where:

$PNFLD_i$ is the private native forests leakage deduction for reporting period i.

ΔCS_n is the carbon stock change (in tonnes CO_2-e) in forest carbon pools in the no-harvest scenario over the 5-year simulation period, calculated in accordance with Equation 2.

ΔCS_h is the carbon stock change (in tonnes CO_2-e) in forest carbon pools in the harvest scenario over the 5-year simulation period, calculated in accordance with Equation 2.

ES_n is the emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in the no harvest scenario over the 5-year simulation period, calculated in accordance with Equation 5.

ES_h is the emissions of CH_4 and N_2O (in tonnes CO_2-e) from post-harvest (slash) burns in the harvest scenario over the 5-year simulation period, calculated in accordance with Equation 5.

(c) In calculating ΔCS_n, ΔCS_h, ES_n and ES_h in Equation 17.

(i) the carbon mass of trees and forest debris in the harvest and no-harvest scenarios must be modelled using FullCAM in accordance with section 34; and

(ii) timber harvesting and post-harvest (slash) burns are the only events that are to be modelled in the harvesting scenario and those events must be removed in the modelling for the corresponding no-harvest scenario (no other events are to be modelled); and

(iii) references to the baseline and project scenarios in Equations 2, 3, 4, 5, 6 and 7, and section 34, must be taken to mean the harvest (baseline) and no harvest (project) scenarios respectively; and

(iv) references to the reporting period in Equations 2, 3, 4, 5, 6 and 7, and section 34, must be taken to mean the 5-year simulation period.

43 Indirect leakage deduction (ILD_i)

The indirect leakage deduction (in tonnes CO_2-e) for a reporting period is calculated using the following equation.

$ILD_i = ((\Delta CS_{p,i} - \Delta CS_{b,i}) - DLD_i - PNFLD_i) \times 0.05$	**Equation 18**

where:

ILD_i is the indirect leakage deduction for reporting period i.

$\Delta CS_{p,i}$ is the carbon stock change (in tonnes CO_2-e) in included carbon pools in the project scenario over reporting period i, calculated in accordance with Equation 2.

$\Delta CS_{b,i}$ is the carbon stock change (in tonnes CO_2-e) in included carbon pools in the baseline scenario over reporting period i, calculated in accordance with Equation 2.

DLD_i is the direct leakage deduction (in tonnes CO_2-e) for reporting period i (if any), calculated in accordance with Equation 15.

$PNFLD_i$ is the private native forests leakage deduction for reporting period i (if any), calculated in accordance with Equation 17.

Division 5.8—Aggregate negative abatement amount

44 Calculating the aggregate negative abatement amount

(1) The project proponent must establish and maintain an aggregate negative abatement account for all eligible offset projects registered under this determination in the State in which the eligible offsets project is located.

(2) If the net abatement number for a reporting period for an eligible offset project registered under this determination in the State is less than zero, the net abatement number must be added to the account.

(3) For Equation 1, the aggregate negative abatement amount (in tonnes CO_2-e) for reporting period i for the project ($ANAA_i$) is calculated as follows:

(a) if the aggregate negative abatement amount in the account at the end of the reporting period is zero, then $ANAA_i$ is zero;

(b) if the aggregate negative abatement amount in the account at the end of the reporting period is less than zero, then $ANAA_i$ is equal to the amount in the account.

Note: If the reporting period for two or more projects in the same State end on the same day, the aggregate negative abatement amount must be applied sequentially to the projects, based on the assumption they report one after the other.

(4) Where a negative abatement amount from the account is applied in the calculation of the net abatement amount for a project, the amount must be deducted from the account.

Division 5.9—Hurdle for eligible carbon abatement

45 Minimum reduction in volume of wood extracted from levels in baseline scenario

(1) The net abatement amount in relation to a reporting period is zero if the volume of wood (in cubic metres, m^3) extracted from the project area during each 12 months of the reporting period is not at least 20% less than the levels in the baseline scenario for each such 12-months period.

Note: If the reporting period is greater than 12 months, the hurdle for eligible carbon abatement applies to each 12-months period sequentially, measured for any such 12-months period against the baseline scenario for that 12-months period.

(2) If the reporting period:

(a) is less than 12 months - subsection (1) applies to that shorter period as if the reference to 12 months were a reference to the reporting period; or

(b) is more than 12 months but is not a multiple of 12 months - subsection (1) applies (in addition to each such 12-months period) to the balance of the reporting period as if the reference to 12 months were a reference to the balance of the reporting period.

(3) The net abatement amount in relation to a reporting period is also zero if the volume of wood (in cubic metres, m^3) extracted from the project area during the period from the declaration of the project as an eligible offsets project until the end of the reporting period is not at least 20% less than the levels in the baseline scenario for that period.

(4) This section does not apply if the net abatement amount calculated under this Part is (but for this section) a negative amount.

Division 5.10—Factors and parameters from external sources

46 Factors and parameters from external sources

(1) If a calculation in this determination includes a factor or parameter that is defined or calculated by reference to another instrument or writing, the factor or parameter to be used for a reporting period is the factor or parameter referred to in, or calculated by reference to, the instrument or writing as in force at the end of the reporting period.

(2) Subsection (1) does not apply if:

(a) this determination specifies otherwise; or

(b) it is not possible to define or calculate the factor or parameter by reference to the instrument or writing as in force at the end of the reporting period.

Division 5.11—Transparency in abatement calculations

47 Publication of data and methods

The project proponent must publish all necessary information, including full details of methods and all relevant data, to enable third parties to replicate the calculation of the carbon dioxide equivalent net abatement amount for each reporting period.

Part 6—Reporting, record-keeping and monitoring requirements

Note: The reporting, record-keeping and monitoring requirements in this Part supplement the general requirements relating to those matters set out in regulations and rules made under the Act.

Division 6.1—Reporting requirements

48 Operation of this Division

For subsections 106(3)(a) and 76(4)(e) of the Act, this Division sets out reporting requirements for an offsets project to which this determination applies that is an eligible offsets project.

49 Information required in offsets reports

(1) An offsets report for a reporting period must include:

(a) a copy of the project map for the project; and

(b) the current management plan for the project under Division 3.3; and

(c) any other forest management plans that are required to be prepared in relation to timber harvesting and other forest management actions in the project area as at the end of the reporting period; and

(d) in the case of any carbon protection area – details of the measures taken to promote the effective management of that area (including in relation to the conservation of biodiversity and to the engagement of Aboriginal people in forest management actions in that area); and

(e) details of the aggregate negative abatement account maintained under section 44, including details of all additions and removals from the account in the reporting period.

(2) If, in modelling a management action or disturbance event in FullCAM, the project proponent specified a portion of the project area affected by a FullCAM event, the offsets report must describe how the portion was estimated.

(3) If, in the circumstances described in paragraph 46(2)(b), a factor or parameter is defined or calculated for a reporting period by reference to an instrument or writing as in force from time to time, the offsets report about the project for the reporting period must include the following information for the factor or parameter.

(a) The versions of the instrument or writing used.

(b) The start and end dates of each use.

(c) The reasons why it was not possible to define or calculate the factor or parameter by reference to the instrument or writing as in force at the end of the reporting period.

50 Timing of offsets reports

For subsection 76(4)(e) of the Act, an offsets report for a project registered under this determination must be given to the Regulator within 48 months after the end of the reporting period.

Note: The extended time to submit offsets reports is needed to ensure data on log production from public and private native forests are available. These data are required for the calculation of the direct leakage deduction under section 41 and private native forests leakage deduction under section 42.

Division 6.2—Record-keeping requirements

51 Operation of this Division

For subsection 106(3)(c) of the Act, this Division sets out record-keeping requirements for an offsets project to which this determination applies that is an eligible offsets project.

52 Records relating to abatement calculations

The project proponent must make and keep records of all methods, data, FullCAM model plots and FullCAM forest estate models used to calculate the carbon dioxide equivalent net abatement amount for each reporting period, including the information required to be published under subsections 27(7) and 28(7) and information concerning the calculation and application of the hurdle requirement under section 45.

53 Records relating to timber harvesting and clearing to facilitate timber harvesting

If timber harvesting was undertaken in the project area during a reporting period, the project proponent must make and keep records that evidence the timber harvesting and areas cleared to facilitate timber harvesting, including the extent of harvesting and clearing and the harvesting practices that were used.

54 Records relating to monitoring harvesting and clearing events

The project proponent must make and keep records that result from the monitoring of harvesting and clearing events under section 58 and evidence the actions that were undertaken in the project area.

55 Mapping and imagery of harvested and cleared areas

The records under this Division must include:

(a) maps of the areas harvested and cleared that are prepared in accordance with the Mapping Guidelines; and

(b) date-stamped and geo-referenced remotely sensed imagery of the harvested and cleared areas.

56 Records relating to aggregate negative abatement account

The project proponent must make and keep records of the aggregate negative abatement account that is required to be established under section 44, including all additions and removals from the account.

Division 6.3—Monitoring requirements

57 Operation of this Division

For subsection 106(3)(d) of the Act, this Division sets out monitoring requirements for an offsets project to which this determination applies that is an eligible offsets project.

58 Monitoring of harvesting and clearing events

The project proponent must monitor timber harvesting and clearing events (including post-harvest (slash) burns) in the project area that are required to be modelled under this determination in the project scenario.

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