

Technical note:

Calculating 2012 performance based payments to Guyana based on interim performance indicators¹

Step 1: Assess “avoided emissions from deforestation” as compared to reference level.

According to the Interim Measures Report and the independent verification report, the gross deforestation in Guyana (interim indicator 1) during the second reporting period (Oct 1st 10 – Dec 31st 11) equaled 0.054% of Guyana’s forest area. The reference level is, as stipulated in the Guyana-Norway Joint Concept Note (March 2011-revision), 0.275%. Given Guyana’s total forest area of 18 388 190 hectares at the start of the second reporting period, and the difference between the reference level and the actual deforestation of 0.221 percentage points, this yields 40 675 hectares of “avoided deforestation”.

Applying a conservative carbon factor of 100 tons per hectare, gives 4 067 500 tons of avoided carbon emissions. This carbon figure is converted to CO₂ by multiplying with 3.67 (reflecting the added weight when one atom of carbon is joined by two atoms of oxygen to form CO₂), yielding 14 927 606 tons of avoided CO₂ emissions.

Step 2: Calculate value of “avoided emissions from deforestation”

The volume of avoided emissions is multiplied with a fixed price of 5 US Dollars per ton of CO₂:

$$14\,927\,606 * 5 \text{ USD} = 74\,638\,031 \text{ USD}$$

Step 3: Subtract increased emissions from forest degradation, based on interim indicators.

Note: Forest degradation is particularly challenging to assess and quantify without a well developed system for forest measuring and monitoring. The partners have agreed to a set of interim degradation indicators, which will be gradually phased out as a more sophisticated forest carbon accounting system is implemented in Guyana. The degradation indicators yield only rough estimates of forest degradation although significant improvements have been made from 2010 to 2011 in quantifying the extent of forest degradation. The process of developing the first results report, studies conducted and presented in the second results report, and the subsequent verification report by Det Norske Veritas (DNV), revealed a need for adjustments in measuring

¹ The reporting period for the second reporting year runs from Oct 1st 2010 – Dec 31st 2011, and is therefore 15 months long. The other reporting periods for the interim performance indicators are 12 months in length. The adjustment in year 2 was made to follow the calendar year, and to coincide with the period with easier access to cloud free satellite data in Guyana.

methods, and adjusted application of, some of the indicators due, *inter alia*, to unforeseen effects of their very conservative design.

Loss of intact forest landscapes

The reduction of compensation on the basis of this indicator equals 350 118 USD.

The reduction in IFL area as compared to the baseline map developed in the first reporting period of the partnership equals 64 hectares. Following the JCN, reduction of the area that meets the IFL criteria is accounted as deforestation with full carbon loss. Note that this calculation was performed after the second reporting year verification process, and the number will therefore be verified in next year's verification.

Guyana and Norway have agreed that this indicator might be phased out in the future, in parallel with a process initiated by Guyana to ensure more permanent status of varying degrees of protection to significant amounts of the IFL areas.

Emission as indirect effect of new infrastructure

No reduction is made on the basis of this indicator.

The area affected by degradation under this indicator has been verified at 5 460 hectares for the second reporting period. For the second reporting year, Guyana made use of a new and significantly improved method for mapping infrastructure related degradation. A historical proxy analysis of areas affected by degradation from infrastructure was conducted for the period 2000-2010. The total area of a 100m buffer surrounding all new infrastructure was calculated for the historical period, as well as for the second year period. This analysis indicated that the area affected by new infrastructure in the second reporting year was comparable to the historical period. This exercise will be verified in the next verification of the interim performance indicators.

As a benchmark for infrastructure related degradation in future reporting periods, the area mapped as degraded in the second reporting period will be used. This area equaled 5460 ha, but as the second reporting period had a length of 15 months, and subsequent reporting periods will be 12 months, this number was annualized. The new benchmark is therefore 4368 ha.

Unless other emission factors can be documented through the MRVS, the areas mapped as degraded under this indicator shall be accounted with a 50 % annual carbon loss, i.e. areas mapped in one year will be accounted with 50 % carbon loss, as well as with a further 50 % carbon loss of the remaining carbon in subsequent reporting periods.

Emissions from forest management

No reduction is made on the basis of this indicator.

3 685 376 tons of CO₂ are reported and verified for this indicator. This is below the baseline of 4 251 583 tons CO₂ (2003 – 2008 average).

Emissions from illegal logging activities

No reduction is made on the basis of this indicator.

In the historical reporting, the default level of 15% of harvested production is used to assess illegal harvest. The rate of illegal logging in the reporting period is informed by a database that records infractions of illegal logging in Guyana in all areas. The indicator shows a reduction in illegal logging activities.

Emissions resulting from anthropogenic forest fires

No reduction is made on the basis of this indicator.

The reported and verified figure is below the estimated historical rates of anthropogenic forest fires.

Step 4: Reducing the maximum amount of results based payment if deforestation is above 0.056%

As described in the Joint Concept Note, the partners have agreed that for any deforestation rate above 0.056%, payment will be gradually reduced and eventually cease if the rate in any given year is above 0.1%.

As the deforestation level in the second reporting year has been reported and verified at 0,054%, this mechanism will not be triggered in calculating performance based payments for this period.

Step 5: Conclusion

The maximum amount payable to the Guyana REDD Investment Fund (GRIF) based on the REDD+ Performance Indicators in the second reporting period is 74 287 913 USD.

Guyana and Norway is in agreement that as there should be an incentive for other donors to join the partnership, Norway will not in any given year pay the full amount Guyana has “earned” according to this model. Moreover, Norway’s total support for the 2010-2015 period is limited upwards to 250 million USD (1.5 bn Norwegian kroners).