

TEMPLATE

DEVIATION REQUEST FORM

PUBLICATION DATE **14.1.2021**

Version **4.0**

A. To be completed by Gold Standard

1| Decision

1.1 | Date – dd/mm/yyyy

1.2 | Decision

1.3 | Is this decision applicable to other project activities under similar circumstances?

B. To be completed by the Project Developer/Coordinating and Managing Entity and/or VVB requesting deviation (Submit deviation request form in Microsoft Word format)

2| Background information

Deviation Reference Number	[to be completed by Gold Standard]	
Date of decision	[to be completed by Gold Standard]	
Precedent (YES/NO)	[to be completed by Gold Standard]	
Precedent details	[to be completed by Gold Standard]	
Date of submission	08/12/2021	
Project/PoA/VPA	Project	ID – GS7554
	<input type="checkbox"/> PoA	ID – GSXXXX
	<input type="checkbox"/> VPA	ID – GSXXXX
Project/PoA/VPA title	Methane Reduction in Irrigated Rice Production, Thailand	
Location of project/PoA/VPA	Thailand	
Scale of the project/PoA/VPA	<input type="checkbox"/> Microscale <input checked="" type="checkbox"/> Small scale <input type="checkbox"/> Large scale	
Gold Standard Impact Registry link of the project/PoA/VPA	NA	
Status of the project/PoA/VPA	<input type="checkbox"/> New <input checked="" type="checkbox"/> Listed <input type="checkbox"/> Certified design <input type="checkbox"/> Certified project	
Title/subject of deviation	Non-application of the ANNEX A requirement “Uncertainty of LUF Parameters”	
Specify applicable rule/requirements/methodology and version number	AMS-III.AU “Methane emission reduction by adjusted water management practice in rice cultivation” for Gold Standard Certification v.1.0 (22.10.2018).	
Specify the monitoring period for which the request is valid (if applicable)	Start date 23/12/2020 End date 22/12/2030	
Submitted by	Contact person name: Paul Leon	
	Email ID: paul.leon@myclimate.org	
	Organisation: Foundation myclimate – The Climate Protection Partnership	
	Project participant: Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Validation and Verification body (VVB opinion shall be included, where required by the	Yes <input type="checkbox"/> NO <input checked="" type="checkbox"/>	

applicable rules/requirements or request is submitted by the VVB).	If yes; VVB name: Auditor name:
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3| Deviation detail

3.1 | Description of the deviation:

**Guidance* Use the space below to describe the deviation and substantiate the reason for requesting deviation from applicable rules/requirements. Please include all relevant information in support of the request. You are requested to follow the principles for requesting deviations, given in the [Deviation Approval Procedure/Design Change Requirements](#).*

3.1.1 | Deviation detail (to be completed by Project developer):

In 2018 myclimate asked the TAC to accept a new CDM project methodology AMS-III.AU "Small-scale Methodology: Methane emission reduction by adjusted water management practice in rice cultivation."

28th of May 2018 the GS TAC did a CDM feasibility assessment and approved the CDM ID: AMS-III.AU methodology. myclimate financed this assessment.

This project is not a carbon removal project (for which the LUF req. were designed) but a methane avoidance project type just like other energy projects like composting projects (where methane is not used for energy use). However, this project was classified as a LUF and not as an Energy type project. This means, that the LUF requirements will be applied which use a 20% deduction (buffer) and a discount rate for uncertainties of LUF parameters. The TAC removed this 20% buffer (in June 2018 → see attached e-mails), but we still have a high deduction from the uncertainties of LUF parameters as you see in our calculations:

Potential ERs:

- Using the CDM methodology: 6.2tCO₂/ha
- With GS4GG classified as a LUF project: Option 2- 4.73tCO₂/ha (based on peer reviews and some samples), Option 3- 2.96CO₂/ha (default values with no field measurements)

We have made the original feasibility of the project based on the CDM methodology and signed a contract with the project owner with a financing model based on the 6.2tCO₂ assumption. Now under the GS approved methodology, the ERs are 30-50% lower than our calculation based on the CDM project methodology AMS-III.AU. This makes the project financially not viable anymore.

Limitation of applying LUF requirements to our project:

The LUF requirements were written for tree planting activities generating ex-ante credits – with certain permanence risk – therefore the establishment of a buffer was justified. This project generates ex-post credits just like any other methane avoidance project – there is no permanence risk – so the TAC rightly agreed to remove this 20% buffer rule requirement since the amount of tCH₄ is monitored and reduced in each monitoring period (see attached mail below). Further, we see no need for a further reduction of uncertainties of LUF parameters because it is either based on field measurements or IPPC default values which are already very conservatively calculated – this requirement only makes sense for carbon removal projects – not for methane avoidance. Otherwise, composting projects would also have to apply this requirement. In addition, many of the LUF requirement don't make sense to our project context - i.e.:

1. Modelling Units
2. Req. 2.1.13: Secured Land titles: The legal land title or similar entitlement for the land on which the project activities are implemented is uncontested → this makes sense for a tree planting project to secure CO₂ ownership for 30yrs. But in this case ERs are generated each year – why is it not sufficient if the project participant signs the CO₂ rights over to the PD?
3. 3.1.5 min. of 10% of total area should be used to enhance biological diversity following High Conservation Value approach – this is not suitable for agricultural project as the total area is used for rice planting. To reduce the area of working for small farmers will have a negative effect on their revenues.
4. Land tenure requirement: since credits are issued ex-post on a yearly level, this req. only makes sense for projects with a long project length horizon; and working with 100s of small farmers signing a paper with each of them is a huge adm. task particularly since the carbon value/ha is very low
5. 4.1.3 – we will be working with 100s of small farmers – to submit GIS vectors for each little parcel is very time consuming
6. Annex A – Uncertainty of LUF Parameters:
 - 1.1.1. It seems the objective of this annex is not to overestimate the estimation of CO₂ sequestration. In the CDM meth. AMS.III.AU there are no uncertainty factors (the default values already are conservative) and to include this factor to project with low ER will impact negatively in the project feasibility.
 - 1.1.2. Our project reduces the emission of CH₄ because of the change in water regimes - there is not any impact because of carbon stock or biomass growth which faces more uncertainty.
7. Annex B – Req. for LUF Smallholder: myclimate was involved in designing these req. specifically to AR activities. (see MoU myclimate&GS in 2014)- only afterwards AGR was added and many req. do not make sense when ex-post credits are generated. i.e. land tenure and above mentioned points.

3.1.2 | VVB opinion (to be completed by VVB, if applicable):

N.A.

3.2 | Assessment of the deviation:

**Guidance* Use the space below to describe how the deviation complies with the requirements, and, where applicable, the accuracy, completeness and conservativeness is ensured. Please include all relevant information in support of the request.*

3.2.1 | Deviation assessment (to be completed by Project developer):

This proposal requests that the project be exempt from using Annex A – Uncertainty of LUF Parameters from the Land Use and Forests Activity Requirements version 1.2.1 (April 2020). According to our view - Uncertainty of LUF Parameters doesn't make sense for ex-post credits which already use very conservative default values or field measurements. The uncertainties of the applied parameters are already included by using conservative default values, as far as we know - the CDM methodology does not apply these uncertainty parameters.

The TAC removed the application of the 20% buffer requirement for our project since it didn't make sense for a project which generates ex-post credits. If the buffer was removed (normally all LUF projects have to contribute to a 20% buffer – so this is an exception) – maybe if the TAC realized the non-applicability of one requirement – maybe it can consider also to remove the uncertainty of LUF parameters.

Methane avoidance biogas projects (AMS III.R) are also implemented in rural areas or other energy projects like composting projects (where methane is not used for energy use) which are based on agricultural activities but are not classified as a LUF projects – they do not have to apply Uncertainty parameters. Why does the AMS-III.AU methodology need to apply it?

The completeness of the ER is achieved as the project include all the GHG sources (based on baseline and project fixed values and/or field measurement) and also the monitoring of all parameters requested in the methodology AMS III-AU.

Concerning the accuracy and conservativeness, we see no need for a further reduction of uncertainties of LUF parameters because it is either based on field measurements or IPPC default values which are already very conservatively calculated – this requirement only makes sense for carbon removal projects – not for methane avoidance. Otherwise, composting projects would also have to apply this requirement.

It seems the objective of the annex A is not to overestimate the estimation of CO₂ sequestration. In the CDM meth. AMS.III.AU there are no uncertainty factors (the default values already are conservative) and to include this factor to project with low ER will impact negatively in the project feasibility.

Our project reduces the emission of CH₄ because of the change in water regimes - there is not any impact because of carbon stock or biomass growth which faces more uncertainty.

Besides the exempt from using is Annex A – Uncertainty of LUF Parameters, additional deviations are requested based on the characteristics of the project. As explained above many of the LUF requirement don't make sense to our project context -i.e.:

1. Modelling Units: Based on concepts stated in AR&LUF requirements Modelling Units are distinct parts of the eligible area where carbon stocks can be quantified to meet the precision level for the carbon stocks estimation. Based on project definition, the concept of MU since its definition is not applicable as our AGR project (methane avoidance project) has a project area (as a whole) where small farmers have little parcel with different sizes.
2. Req. 2.1.13: Secured Land titles: The legal land title or similar entitlement for the land on which the project activities are implemented is uncontested → this makes sense for a tree planting project to secure CO₂ ownership for 30yrs. But in this case ERs are generated each year – here we consider sufficient if the project participant signs the CO₂ rights over to the PD. It generate a legal entitlement.
3. 3.1.5 min. of 10% of total area should be used to enhance biological diversity following High Conservation Value approach – this is not suitable for agricultural project as the total area is used for rice planting (each of them have little parcel). To reduce the area of working for small farmers will have a negative effect on their revenues.
4. Land tenure requirement: since credits are issued ex-post on a yearly level, this req. only makes sense for projects with a long project length horizon; and working with 100s of small farmers signing a paper with each of them is a huge adm. task particularly since the carbon value/ha is very low
5. 4.1.3 – we will be working with 100s of small farmers – to submit GIS vectors for each little parcel is very time consuming.
6. Annex B – Req. for LUF Smallholder: myclimate was involved in designing these req. specifically to AR activities. (see MoU myclimate&GS in 2014)- only afterwards AGR was added and many req. do not make sense when ex-post credits are generated. i.e. land tenure and above mentioned points.

Concerning the six additional deviations proposed, they are about the applicability for our project type (AGR) as we consider is difficult for our project characteristics as it is not AR activities which accounts carbon stock. These deviations will comply the AR&LUF requirements and/or request a deviation from requirements defined for AR&LUF project.

1. Modelling Units: Not applicability for our project but maintain the definition of project area.
2. Secured Land titles and Land tenure: Here we consider the CO₂ rights signs over to the PD as a sufficient legal entitlement.
3. The 10% of total area should be used to enhance biological diversity following High Conservation Value approach: As each rice farmer has a small parcels to reduce 10% will have a negative effect on their revenues. Here a deviation of the request would have a positive impact in small farmers revenues. As its applicability will bring a negative effect in farmers participation in project activity.
4. The submission of GIS vectors for each little parcel is very time consuming. So far we have the next information gathered for our PD.

https://www.google.com/maps/d/viewer?mid=1bdq9scLbVclYaHKmPjn_fB8N3KWn7ET3&ll=17.317305160049273%2C103.79887419999997&z=11

And about the accuracy, completeness and conservativeness as these changes will not affect the ER estimation, only a deviation in the type of evidence for each requirement, we consider that the explanation about the evidence to gather for the six points will not have an impact on project design, safeguarding principles assessment, SDG assessment, emissions reductions, monitoring frequency, data quality, potential risk or any other relevant aspect of the project.

3.2.2 | VVB opinion (to be completed by VVB, if applicable):

N.A.

3.3 | Impact of the deviation:

**Guidance* Use the space below to describe the impact of the deviation on project design, safeguarding principles assessment, SDG assessment, emissions reductions, monitoring frequency, data quality, potential risk or any other relevant aspect of the project. Please substantiate the impact assessment with relevant and verifiable data/information.*

3.3.1 | Impact assessment (to be completed by Project developer):

The deviation request does not have any impact in the project design, it is the same project as described in the PDD to support farmers in irrigated areas of Sakon Nakhon to adopt Alternate Wetting and Drying Method (AWD) in their rice cultivation.

The non-use of annex A will have no impact in safeguarding principles assessment as the same was already done and included in PDD draft version (for LISTING), and any of the principles depend on the uncertainty of LUF parameters.

About the SDG assessment: there is no impact as the same was already included in the stakeholder consultation report and draft PDD, the only impact is about the fixed values used for parameters (AMS-III.AU "Methane emission reduction by adjusted water management practice in rice cultivation") to estimate the SDG 13 outcomes (emission reductions), see below the parameters:

Data/parameter	EF _{BL,c}
Unit	kgCH ₄ /ha/day or kgCH ₄ /ha/season
Description	Baseline emission factor for continuously flooded fields without organic amendments
Source of data	Methodology III.AU Methane emission reduction by adjusted water management practice in rice cultivation V4.0 page 14 footnote 6. IPCC 2006, volume 4, chapter 5.5, Table 5.11

Value(s) applied	1.30
Choice of data or Measurement methods and procedures	<p>1. Peer review peer reviewed published literature and if needed measurements in a set of sample sites (If the uncertainty of estimates is less than or equal to 20% of the mean change value then the project owner may use the estimated value without any deduction for uncertainty).</p> <p>2. Default value</p> <p>Determined ex ante prior to the start of the project activity (in this case, the ex-ante value should be used to calculate emissions reduction during the crediting period) or monitored annually</p>
Purpose of data	<p>Calculation of baseline scenario</p> <p>Calculation of project scenario</p>
Additional comment	<p>In case option 2. Default value is used. Based on Annex A – Uncertainty of LUF parameters approach 3 is used for this parameter.</p> <p>Based on IPCC 2006, volume 4, chapter 5.5, Table 5.11, the value of 1.30 have an error range of 0.8-2.2.</p> <p>Estimated mean lower bound = $1.3 - 0.5$</p> <p>Calculate uncertainty $U = 0.5/1.3 = 38\%$</p> <p>Resulting Uncertainty = $75\% * 0.5 = 0.375 \text{ kgCH}_4/\text{ha}/\text{day}$</p> <p>Discounted conservative mean for $EF_{BL,c} = 1.30 - 0.375 = 0.925$</p>

Data/parameter	$SF_{BL,w}$
Unit	-
Description	Baseline scaling factors to account for the differences in water regime during the cultivation period
Source of data	IPCC 2006, volume 4, chapter 5.5, Table 5.12
Value(s) applied	1.00
Choice of data or Measurement methods and procedures	<p>1. Peer review peer reviewed published literature and if needed measurements in a set of sample sites (If the uncertainty of estimates is less than or equal to 20% of the mean change value then the project owner may use the estimated value without any deduction for uncertainty).</p> <p>2. Default value (for continuously flooded).</p>
Purpose of data	Calculation of baseline scenario
Additional comment	In case option 2. Default value is used. Based on Annex A – Uncertainty of LUF parameters approach 3 is used for

	<p>this parameter.</p> <p>Based on IPCC 2006, volume 4, chapter 5.5, Table 5.12, the value of 1.00 have an error range of 0.79-1.26.</p> <p>Estimated mean lower bound = $1.00 - 0.21$</p> <p>Calculate uncertainty $U = 0.21/1.00 = 21\%$</p> <p>Resulting Uncertainty = $50\% \times 0.21 = 0.105$</p> <p>Discounted conservative mean for $SF_{BL,w} = 1.00 - 0.105 = 0.895$</p>
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Data/parameter	$SF_{P,w}$
Unit	-
Description	Project scaling factors to account for the differences in water regime during the cultivation period
Source of data	IPCC 2006, volume 4, chapter 5.5, Table 5.12
Value(s) applied	0.52
Choice of data or Measurement methods and procedures	<p>1. Peer review peer reviewed published literature and if needed measurements in a set of sample sites (If the uncertainty of estimates is less than or equal to 20% of the mean change value then the project owner may use the estimated value without any deduction for uncertainty).</p> <p>2. Default value (for intermittently flooded - multiple aeration).</p>
Purpose of data	Calculation of project scenario
Additional comment	<p>In case option 2. Default value is used. Based on Annex A – Uncertainty of LUF parameters approach 3 is used for this parameter.</p> <p>Based on IPCC 2006, volume 4, chapter 5.5, Table 5.12, the value of 0.52 have an error range of 0.41-0.66.</p> <p>Estimated mean higher bound = $0.52 + 0.14$</p> <p>Calculate uncertainty $U = 0.14/0.52 = 27\%$</p> <p>Resulting Uncertainty = $50\% \times 0.14 = 0.07$</p> <p>Discounted conservative mean for $SF_{P,w} = 0.52 + 0.07 = 0.59$</p>

Data/parameter	$SF_{BL,o}$
Unit	-
Description	Baseline scaling factors should vary for both type and amount of organic amendment applied

Source of data	IPCC 2006, volume 4, chapter 5.5, Table 5.14
Value(s) applied	2.88
Choice of data or Measurement methods and procedures	1. Peer review peer reviewed published literature and if needed measurements in a set of sample sites (If the uncertainty of estimates is less than or equal to 20% of the mean change value then the project owner may use the estimated value without any deduction for uncertainty). 2. Default value (for non flooded pre-season < 180 days - indicating double cropping).
Purpose of data	Calculation of project scenario
Additional comment	Based on Annex A – Uncertainty of LUF parameters approach 3 is used for this parameter. Based on IPCC 2006, volume 4, chapter 5.5, Table 5.14, the value of 2.88 have an error range of 2.84-2.93. Estimated mean lower bound = $2.88 - 0.04$ Calculate uncertainty $U = 0.04 / 2.88 = 1\%$ Resulting Uncertainty = $0\% * 0.04 = 0$ Discounted conservative mean for $SF_{BL,0} = 2.88 + 0 = 2.88$

Data/parameter	$SF_{P,0}$
Unit	-
Description	Project scaling factors should vary for both type and amount of organic amendment applied
Source of data	IPCC 2006, volume 4, chapter 5.5, Table 5.14
Value(s) applied	2.88
Choice of data or Measurement methods and procedures	1. Peer review peer reviewed published literature and if needed measurements in a set of sample sites (If the uncertainty of estimates is less than or equal to 20% of the mean change value then the project owner may use the estimated value without any deduction for uncertainty). 2. Default value (for non flooded pre-season < 180 days - indicating double cropping).
Purpose of data	Calculation of project scenario
Additional comment	In case option 2. Default value is used. Based on Annex A – Uncertainty of LUF parameters approach 3 is used for this parameter. Based on IPCC 2006, volume 4, chapter 5.5, Table 5.14, the value of 2.88 have an error range of 2.84-2.93. Estimated mean higher bound = $2.88 + 0.05$

Calculate uncertainty $U = 0.05/2.88 = 2\%$
 Resulting Uncertainty = $0\% * 0.05 = 0$

Discounted conservative mean for $SF_{p,0} = 2.88 + 0 = 2.88$

Concerning the emission reductions, it is proposed to use the conservative values stated in the methodology AMS-III.AU without the requirements of annex A uncertainty of LUF parameters. As explained we understand that the objective of the annex A is not to overestimate the estimation of CO₂ sequestration.

The monitoring frequency is not affected by any parameter, as already described in PDD draft version (under LISTING reviewing), the frequency will not depend on the annex A uncertainty of parameters, hence no effect over this point.

There will not be impact in the data quality of the parameters. Therefore, we do not consider necessary a further reduction of uncertainties of LUF parameters because it is either based on field measurements or IPCC default values which are already very conservatively calculated.

There is no other potential risk or any other relevant aspect that impact in the project.

3.3.2 | VVB opinion (to be completed by VVB, if applicable):

N.A.

3.4 | Documents:

**Guidance* List of documents provided (note that once a decision has been made by Gold Standard, this deviation form along with supporting documents will be made public on the Gold Standard website. If any of the supporting documents are confidential, please indicate here to ensure they are omitted.)*

1. The email (June 2018) that TAC removed the 20% buffer.
2. ER calculation approved in Preliminary Review.
3. PDD (draft version) approved in Preliminary Review.
4. IPCC 2006 Volume 4: Agriculture, Forestry and Other Land Use. Chapter 5 Cropland.