



**Validation report form for post-registration changes for
CDM programme of activities
(Version 03.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

| | |
|---|--|
| Title and UNFCCC reference number of the programme of activities (PoA) | Mali Rural Electrification Program Ref. No.: PoA10429 |
| Process track | <input checked="" type="checkbox"/> Prior approval <input type="checkbox"/> Issuance <input type="checkbox"/> Renewal of PoA |
| Version number of the validation report on PoA PRCs | 1.1 |
| Completion date of the validation report on PoA PRCs | 07/06/2021 |
| Version number of PoA-DD applicable to this validation report | 12.0 |
| Type(s) of PoA PRCs | <input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines <input checked="" type="checkbox"/> Corrections <input type="checkbox"/> Inclusion of monitoring plan <input type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other applied standards or tools <input checked="" type="checkbox"/> Changes to the programme design <input type="checkbox"/> Changes specific to afforestation and reforestation activities |
| Coordinating/managing entity | Agence Malienne pour le Développement de l'Energie Domestique et de l'Electrification Rurale (AMADER) |
| Host Parties | Republic of Mali |
| Applied methodologies and standardized baselines | AMS III.BL: Integrated methodology for electrification of communities, version 1 AMS-III.AR: Substituting fossil fuel based lighting with LED/CFL lighting systems, version 5 No standardized baseline applied |
| Mandatory sectoral scopes linked to the applied methodologies | 1 |
| Conditional sectoral scopes linked to the applied methodologies, if applicable | - |
| Name and UNFCCC reference number of the DOE | Name: TÜV NORD CERT GmbH (TÜV NORD) Ref. No.: E-0022 |

Name, position and signature of the approver
of the validation report on PoA PRCs


Stefan Winter
Final approver

SECTION A. Executive summary

Agence Malienne pour le Développement de l'Energie Domestique et de l'Electrification Rurale (AMADER) has commissioned the TÜV NORD JI/CDM Certification Program (CP) to assess post registration changes of the Programme of Activities (UNFCCC Reference: PoA10429)

“Mali Rural Electrification Program”

The detailed assessment of appropriateness of proposed post registration changes are contained in this report.

Essential data of the project is presented in the following Table 1.

Table 1: PoA Characteristics

| Item | Data | |
|------------------------------|--|---|
| Project title | Mali Rural Electrification Program | |
| Project type | <input type="checkbox"/> Standard | <input checked="" type="checkbox"/> PoA |
| Project size | <input type="checkbox"/> Large Scale | <input checked="" type="checkbox"/> Small Scale |
| Technical Area(s) | TA 1.2: Renewables | |
| Location | Republic of Mali | |
| Crediting period of each CPA | <input checked="" type="checkbox"/> Renewable Crediting Period (7 y) <input type="checkbox"/> Fixed Crediting Period (10 y) | |

SECTION B. Validation team, technical reviewer and approver

On the basis of a competence analysis and individual availabilities an assessment team, consistent of one team leader was appointed. Furthermore, also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the following table below.

B.1. Validation team member

| No. | Role | Type of resource | Last name | First name | Affiliation (e.g. name of central or other office of DOE or outsourced entity) | Involvement in | | | |
|-----|-------------|------------------|-----------|------------|---|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| | | | | | | Desk/document review | On-site inspection | Interviews | Validation findings |
| 1. | Team Leader | EI | Lubanga | David | - | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

B.2. Technical reviewer and approver of the validation report on PoA PRCs

| No. | Role | Type of resource | Last name | First name | Affiliation (e.g. name of central or other office of DOE or outsourced entity) |
|-----|---------------------------------|------------------|-----------|------------|---|
| 1. | Technical reviewer/ Approver | IR | Winter | Stefan | TN CERT GmbH |

SECTION C. Means of validation**C.1. Document review**

The assessment of post registration changes consisted of the following steps:

- Appointment of team members and technical reviewers
- A desk review of the registered and revised PoA-DD/^{PoA-DD/} submitted by the client and additional supporting documents
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Resolution of corrective actions (CARs / CLs) (if any)
- Final reporting
- Technical review
- Final approval.

The registered as well as the revised PoA-DD and supporting background documents related to the project design and the post registration changes were reviewed.

As far as required the assessment team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

A list all documents reviewed or referenced during this validation is presented in Appendix 3 below.

C.2. On-site inspection

| Duration of on-site inspection: 15/03/2021 | | | | |
|--|---|------------------|------------|---------------|
| No. | Activity performed on-site | Site location | Date | Team member |
| 1. | An Onsite inspection is not mandatory as the stated annual average CO ₂ emission reductions of the PoA as per UNFCCC PoA webpage is below 100,000 tCO ₂ e at 89,386 tCO ₂ e. Besides, a WebEx call has been conducted with the persons stated below under C.3. | | | |
| 2. | Discussion and interview on following topics: <ul style="list-style-type: none"> - Proposed changes and type of changes - Validation scope - Impact on equations/ER calculations - Applicability of the meth(s) - Updated EC criteria - Additionality | Remote via WebEx | 15/03/2021 | David Lubanga |

C.3. Interviews

| No. | Interviewee | | | Date | Subject | Team member |
|-----|-------------|------------|--|------------|---|---------------|
| | Last name | First name | Affiliation | | | |
| 1. | Belenky | Lukas | Consultant /IM01/ | 15/03/2021 | <ul style="list-style-type: none"> - Proposed changes and type of changes - Validation scope - Impact on equations/ER calculations - Applicability of the meth(s) - Updated EC criteria - Additionality | David Lubanga |
| 2. | Bowden | Nick | Carbon Finance Specialist, the World Bank /IM01/ | | | |

C.4. Clarification requests, corrective action requests and forward action requests raised

| Areas of validation findings | No. of CL | No. of CAR | No. of FAR |
|---|-----------|------------|------------|
| Compliance with PoA-DD form | 0 | 0 | 0 |
| Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines | 0 | 0 | 0 |
| Corrections | 0 | 0 | 0 |
| Inclusion of monitoring plan | 0 | 0 | 0 |
| Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other applied standards or tools | 0 | 0 | 0 |
| Changes to the programme design | 1 | 1 | 0 |
| Changes specific to afforestation and reforestation activities | 0 | 0 | 0 |
| Others (please specify) <ul style="list-style-type: none"> • CPA boundary • Baseline scenario • Leakage | 0 | 0 | 0 |
| Total | 1 | 1 | 0 |

SECTION D. Validation findings**D.1. Compliance with the PoA-DD form**

| | |
|----------------------------|---|
| Means of validation | <p>The project participants used the latest version of the PoA-DD form for the revised PoA-DD than the version of the PoA-DD form of the registered PoA-DD. By means of checking updated PoA-DD against the latest applicable and available PoA-DD template form the validation team can confirm that the information transferred to the later version of the PoA-DD form is materially the same as that in the registered PoA-DD besides those changes highlighted and assessed under this report.</p> <p>Further, it has been checked whether the latest instructions for filling the PoA-DD have been followed. Every section has been checked against the respective guidance.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> • /PoA-DD/ • /PoA-DD-F/ • /unfccc/ |
| Findings | - |
| Conclusion | The updated PoA-DD is in tracked-change and clean version is in line with the latest applicable PoA-DD form. The validation team can confirm that the information transferred to the later valid version 9.0 is materially the same as that in the registered PoA-DD. |

D.2. Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines

| | | | | |
|--|--|--------------------------|--|------------|
| Means of validation | Type of change(s): | <input type="checkbox"/> | <i>Temporary Deviation from Monitoring Plan</i> | |
| | | <input type="checkbox"/> | <i>Temporary Deviation from applied Methodologies</i> | |
| | Description of post registration change | | | |
| | Start Date: Please provide the start date of the change | DD/MM/YYYY | End Date: Please provide the end date of the change, if applicable | DD/MM/YYYY |
| | Description: Please give a detailed description of the change(s) | Not applicable. | | |
| | Assessment of post registration change – Temporary deviations from MP or MM | | | |
| | Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation. | | | |
| | Conservative-ness: Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated. | | | |
| Appendix 2 PS: Check if the changes fall under one of the scenarios of Appendix 2 of the PS for PoA. | | | | |

| Findings | - | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|------------------------------|--|--|--|--------------------------|--|--|--------------------------|--|--|--------------------------|---|----------------|--|--|--|--------------------------|--|--|--------------------------|--|
| Conclusion | <p>Based on the above the temporary deviation(s) from the registered monitoring plan, applied monitoring methodology and/or applied standardized baseline are in accordance with applicable validation requirements related to the Temporary deviations from the registered monitoring plan, applied methodologies or standardized baselines in the VVS for PoA.</p> <table border="1"> <tr> <th colspan="3">Revised PoA-DD and/or CPA-DD</th> </tr> <tr> <td>Rev. of PoA-DD and/or CPA-DD: Check whether the changes have been fully addressed in a revised PoA-DD and/or CPA-DD.</td> <td><input type="checkbox"/></td> <td>The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD.</td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td>A revision of the PoA-DD and/or CPA-DD is not required (in case of temp. changes).</td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td>The revised PoA-DD and/or CPA-DD has been forwarded in (i) track-change and (ii) clean version.</td> </tr> <tr> <th colspan="3">Prior Approval</th> </tr> <tr> <td>Prior approval: Assess whether the change requires prior approval of the board</td> <td><input type="checkbox"/></td> <td>The post registration change requires prior approval</td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td>The post registration change does not require prior approval</td> </tr> </table> | | | Revised PoA-DD and/or CPA-DD | | | Rev. of PoA-DD and/or CPA-DD: Check whether the changes have been fully addressed in a revised PoA-DD and/or CPA-DD. | <input type="checkbox"/> | The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD. | | <input type="checkbox"/> | A revision of the PoA-DD and/or CPA-DD is not required (in case of temp. changes). | | <input type="checkbox"/> | The revised PoA-DD and/or CPA-DD has been forwarded in (i) track-change and (ii) clean version. | Prior Approval | | | Prior approval: Assess whether the change requires prior approval of the board | <input type="checkbox"/> | The post registration change requires prior approval | | <input type="checkbox"/> | The post registration change does not require prior approval |
| Revised PoA-DD and/or CPA-DD | | | | | | | | | | | | | | | | | | | | | | | | |
| Rev. of PoA-DD and/or CPA-DD: Check whether the changes have been fully addressed in a revised PoA-DD and/or CPA-DD. | <input type="checkbox"/> | The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD. | | | | | | | | | | | | | | | | | | | | | | |
| | <input type="checkbox"/> | A revision of the PoA-DD and/or CPA-DD is not required (in case of temp. changes). | | | | | | | | | | | | | | | | | | | | | | |
| | <input type="checkbox"/> | The revised PoA-DD and/or CPA-DD has been forwarded in (i) track-change and (ii) clean version. | | | | | | | | | | | | | | | | | | | | | | |
| Prior Approval | | | | | | | | | | | | | | | | | | | | | | | | |
| Prior approval: Assess whether the change requires prior approval of the board | <input type="checkbox"/> | The post registration change requires prior approval | | | | | | | | | | | | | | | | | | | | | | |
| | <input type="checkbox"/> | The post registration change does not require prior approval | | | | | | | | | | | | | | | | | | | | | | |

D.3. Corrections

| Means of validation | Description of post registration change | | | | | | | | | | | | | | |
|---|---|--|--|------------------------------|--|--|---|-------------------------------------|--|--|--------------------------|--|--|-------------------------------------|---|
| | Start Date: Please provide the start date of the change | 02/06/2018 | End Date: Please provide the end date of the change, if applicable | | | | | | | | | | | | |
| | Description: Please give a detailed description of the change(s) | A statement in the generic CPA Type 2 is added to state that battery-charged LED and CFL technologies included under the CPA Type 2 will be Lighting Africa-certified and have a capacity equal to or less than 10W. | | | | | | | | | | | | | |
| | Assessment of post registration change – Corrections | | | | | | | | | | | | | | |
| | Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation. | Correction enhances clarity to allow for solar PV units of up to 10W rating, and does not affect the accuracy of emission reductions | | | | | | | | | | | | | |
| | Conservativeness: Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated. | The corrections have no impact on the accuracy of emission reduction calculations. ER has not been re-calculated and therefore conservativeness is not affected. | | | | | | | | | | | | | |
| | Appendix 2 PoA-PS: Check if the changes fall under one of the scenarios of Appendix 2 of the PS for PoA. | The information updated in the PoA-DD do not affect the PoA design and hence fall under §1 a) of Appendix 2 of the CDM project standard for programmes of Activities, version 02.0 | | | | | | | | | | | | | |
| Findings | - | | | | | | | | | | | | | | |
| Conclusion | <p>Based on the above stated the corrections to the registered PoA-DD are in accordance with applicable validation requirements related to the corrections in the VVS for PoA.</p> <table border="1"> <tr> <th colspan="3">Revised PoA-DD and/or CPA-DD</th> </tr> <tr> <td>Rev. of PoA-DD and/or CPA-DD: Check whether the changes have been fully addressed in a revised PoA-DD</td> <td><input checked="" type="checkbox"/></td> <td>The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD.</td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td>A revision of the PoA-DD and/or CPA-DD is not required (in case of temp. changes).</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/></td> <td>The revised PoA-DD and/or CPA-DD has been</td> </tr> </table> | | | Revised PoA-DD and/or CPA-DD | | | Rev. of PoA-DD and/or CPA-DD: Check whether the changes have been fully addressed in a revised PoA-DD | <input checked="" type="checkbox"/> | The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD. | | <input type="checkbox"/> | A revision of the PoA-DD and/or CPA-DD is not required (in case of temp. changes). | | <input checked="" type="checkbox"/> | The revised PoA-DD and/or CPA-DD has been |
| Revised PoA-DD and/or CPA-DD | | | | | | | | | | | | | | | |
| Rev. of PoA-DD and/or CPA-DD: Check whether the changes have been fully addressed in a revised PoA-DD | <input checked="" type="checkbox"/> | The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD. | | | | | | | | | | | | | |
| | <input type="checkbox"/> | A revision of the PoA-DD and/or CPA-DD is not required (in case of temp. changes). | | | | | | | | | | | | | |
| | <input checked="" type="checkbox"/> | The revised PoA-DD and/or CPA-DD has been | | | | | | | | | | | | | |

| | | | |
|--|--|--|---|
| | and/or CPA-DD. | | forwarded in (i) track-change and (ii) clean version. |
| | Prior Approval | | |
| | Prior approval: Assess whether the change requires prior approval of the board | <input type="checkbox"/> | The post registration change requires prior approval |
| | <input checked="" type="checkbox"/> | The post registration change does not require prior approval | |

D.4. Inclusion of monitoring plan

| | | | | |
|---|--|--|--|------------|
| Means of validation | Description of post registration change | | | |
| | Start Date: Please provide the start date of the change | DD/MM/YYYY | End Date: Please provide the end date of the change, if applicable | DD/MM/YYYY |
| | Description: Please give a detailed description of the change(s) | Not applicable. | | |
| | Assessment of post registration change – Inclusion of a MP | | | |
| | MM compliance: Please check in case of changes to the registered MP, whether they are in compliance with the MM. | | | |
| | Later version of MM: Please check in cases where compliance with a later version of the MM is demonstrated that the conservativeness of the monitoring and verification is not affected. | | | |
| | Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation. | | | |
| | Conservative-ness: Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated. | | | |
| | Appendix 2 PS: Check if the changes fall under one of the scenarios of Appendix 2 of the PS for PoA. | | | |
| Findings | | | | |
| Conclusion | | | | |
| Based on the above stated the inclusion of a monitoring plan to the registered project activity is in accordance with applicable validation requirements related to the inclusion of a monitoring plan to a registered project activity in the VVS for PoA. | | | | |
| Revised PoA-DD and/or CPA-DD | | | | |
| Rev. of PoA-DD and/or CPA-DD: Check whether the | <input type="checkbox"/> | The changes have correctly been reflected in the revised PoA-DD and/or CPA-DD. | | |
| | <input type="checkbox"/> | A revision of the PoA-DD and/or CPA-DD is not | | |

| | | | |
|--|---|--|--|
| | changes have been fully addressed in a revised PoA-DD and/or CPA-DD. | <input type="checkbox"/> | required (in case of temp. changes). |
| | The revised PoA-DD and/or CPA-DD has been forwarded in (i) track-change and (ii) clean version. | | |
| | Prior Approval | | |
| | Prior approval: Assess whether the change requires prior approval of the board | <input type="checkbox"/> | The post registration change requires prior approval |
| | <input type="checkbox"/> | The post registration change does not require prior approval | |

D.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other applied standards or tools

| | | | | |
|---|--|--------------------------|--|---|
| Means of validation | Type of change(s): | <input type="checkbox"/> | <i>Permanent Change from Monitoring Plan</i> | |
| | | <input type="checkbox"/> | <i>Permanent Change from the applied methodologies</i> | |
| | | <input type="checkbox"/> | <i>Permanent Change from standardized baselines</i> | |
| | | <input type="checkbox"/> | <i>Permanent Change from other applied standards or tools</i> | |
| | Description of post registration change | | | |
| | Start Date: Please provide the start date of the change | - | End Date: Please provide the end date of the change, if applicable | - |
| | Description: Please give a detailed description of the change(s) | Not applicable | | |
| | Assessment of post registration change – Permanent changes from MP or MM | | | |
| | MM compliance: Please check in case of changes to the registered MP, whether they are in compliance with the MM. | | | |
| | Later version of MM: Please check in cases where compliance with a later version of the MM is demonstrated that the conservativeness of the monitoring and verification is not affected. | | | |
| Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation. | | | | |
| Conservative-ness: Please give a detailed assessment whether conservative assumptions or | | | | |

| | | |
|-------------------|--|--|
| | discount factors have been applied to ensure that ER will not be overestimated. | |
| | Appendix 2 PS: Check if the changes fall under one of the scenarios of Appendix 2 of the PS for PoA. | |
| Findings | - | |
| Conclusion | Based on the above stated, the permanent changes from the registered monitoring plan are in accordance with applicable validation requirements related to the permanent changes from the registered monitoring plan, monitoring methodology and/or standardized baseline in the VVS for PoA. | |
| | Revised PoA-DD | |
| | Rev. of PoA-DD: Check whether the changes have been fully addressed in a revised PDD. | <input type="checkbox"/> The changes have correctly been reflected in the revised PoA-DD. <input type="checkbox"/> A revision of the PoA-DD is not required (in case of temp. changes). <input type="checkbox"/> The revised PoA-DD has been forwarded in (i) track-change and (ii) clean version. |
| | Prior Approval | |
| | Prior approval: Assess whether the change requires prior approval of the board | <input type="checkbox"/> The post registration change requires prior approval <input type="checkbox"/> The post registration change does not require prior approval |

D.6. Changes to the programme design

| | | | | | | | |
|----------------------------|---|--|---|---------------------------------|--|--------------------------|-------------------------------|
| Means of validation | <table border="1"> <tr> <td>Type of change(s):</td><td><input checked="" type="checkbox"/></td><td>Changes to the programme design</td></tr> <tr> <td></td><td><input type="checkbox"/></td><td>Changes to the project design</td></tr> </table> | Type of change(s): | <input checked="" type="checkbox"/> | Changes to the programme design | | <input type="checkbox"/> | Changes to the project design |
| Type of change(s): | <input checked="" type="checkbox"/> | Changes to the programme design | | | | | |
| | <input type="checkbox"/> | Changes to the project design | | | | | |
| | Description of post registration change | | | | | | |
| | Start Date: Please provide the start date of the change | 02/06/2018 | End Date: Please provide the end date of the change, if applicable - | | | | |
| | Description: Please give a detailed description of the change(s) | 1. The CME proposes to include new only solar PV mini-grids as well as new hybrid solar PV/diesel mini-grids for CPA Type 1. The new measures are applicable under the applied methodology AMS-III.BL. 2. The CME has added the eligibility criterion 13 to all the four generic CPA types, to clarify that all carbon rights belong to the CME. | | | | | |
| | Applicability and application of the Approved Baseline Methodology | | | | | | |
| | Description: Please give a detailed description on how the changes affect the applicability and application of the approved Baseline Methodology. Check if the actual changes would adversely affect the conclusions during validation. | 1. The project will supply electricity to eligible users within the defined PoA boundary. The added measures under this PRC are applicable as per paragraph 5a, 5c or 5d of the applied methodology. Three consumer types (I, II, & III) are now eligible under the program as defined by the methodology AMS-III.BL, version 1.0. All relevant baseline and project emissions equations and applicable default emission factors have been appropriately selected by the CME and deemed to be correct. Related project emissions for mini grids as per methodology §42-45 have been considered and as no individual systems (neither individual renewable nor | | | | | |

| | | |
|-----------------------|--|--|
| | | <p>individual hybrid systems) will be installed PE_{IS,y} is correctly set to zero.</p> <p>2. The eligibility criterion 13 clarifies carbon rights ownership to avoid potential double counting. CPA implementers, manufacturers, service providers, distributors, and third-party end-users cannot claim CERs, and engaging with the CPA shall cede all carbon rights to the CME.</p> <p>The proposed changes do not adversely affect the conclusions during validation.</p> |
| | CL 01, & CAR 01 | |
| | Additionality assessment | |
| | <p>Description:</p> <p>Please give a detailed description re-assessment of additionality, Check whether the actual changes would adversely affect the conclusions during validation. If required please make use of the assessment tables in the annex.</p> | <p>Additionality of the programme is not affected by the proposed design changes. For the PoA additionality, the PoA is a voluntary action by the CME. No laws or regulations make it mandatory for the CME to implement the programme of activities.</p> <p>CPAs under the PoA will apply the Methodological Tool 19 in the demonstration of additionality</p> <ol style="list-style-type: none"> 1. Each CPA is a micro-scale project activity. Achieved emission reductions on aggregate by each CDM unit (a single mini-grid) within a CPA shall not exceed 20,000 tCO₂ equivalent. 2. All CPAs will be in the Republic of Mali, which is an LDC at the time of PoA registration. <p>Even by applying the above stated changes, the additionality concept is not affected and still remains the same.</p> |
| | Scale of the Project activity | |
| | <p>Description:</p> <p>Please give a detailed regarding the effect of the changes on the scale of the PoA (i.e. LSC or SSC).</p> | <ol style="list-style-type: none"> 1. The design change does not affect the scale of the component project activities for the generic CPA Type 1. All CPAs shall still be within the micro-scale threshold of 20,000 tCO_{2e} annually at the CDM Unit level as ensured via the relevant eligibility criterion. |
| Revised PoA-DD | | |

| | | | |
|-------------------|--|---|--|
| | <p>Rev. of PoA-DD:</p> <p>Check whether the changes have been fully addressed in a revised PoA-DD. In this context pl. refer to</p> <ul style="list-style-type: none"> - Changes to the project boundary and GHG Sources - Changes to the baseline scenario. - Changes to the estimation of emission reductions of a generic CPA - Effects with regards to compliance with the MP and level of accuracy and completeness of monitoring. | <p>The post registration changes have correctly been reflected in the revised PoA-DD. This assessment is based on the following considerations:</p> <ul style="list-style-type: none"> - The scale of the PoA is not affected. All CPAs shall be within the SSC limit and the CPA Type 1 is applying the microscale limit of 20ktCO₂e vide eligibility criterion 4. - Additionality is demonstrated at the CPA level. Micro-scale additionality criteria and PoA boundary remain the same - The applicability and application of the new methodology as well as eligibility criteria for inclusion have been sufficiently demonstrated. - The baseline is clearly re-defined to align with the applied methodology. GHG methodological choices, equations and sample calculations have been added to accommodate the two new proposed measures. - The PoA boundary is still the geographic boundary of Mali. All GHGs and sources included in the PoA boundary also remain unchanged. | |
| | Revised Specific CPA-DDs | | |
| | <p>Rev. of Specific CPA-DDs:</p> <p>Check whether the changes have been fully addressed in a revised PoA-DD. In this context pl. refer to</p> <ul style="list-style-type: none"> - Changes to the project boundary and GHG Sources - Changes to the baseline scenario. - Changes to the estimation of emission reductions of a generic CPA - Effects with regards to compliance with the MP and level of accuracy and completeness of monitoring. | Not applicable | |
| Findings | - CL 01, CAR 01 | | |
| Conclusion | <p>Revised PoA-DD</p> <p>As per VVS 2.0 § 285 it is confirmed that the revised PoA-DD meets all applicability requirements of AMS III.BL: Integrated methodology for electrification of communities, version 1.0, and the AMS-III.AR: Substituting fossil fuel-based lighting with LED/CFL lighting systems, version 5.0.</p> | | |
| | <p>Traceability:</p> <p>Check if the PPs have provided a revised</p> | <input checked="" type="checkbox"/> The changes have correctly been reflected in the revised PoA-DD. | |
| | | <input type="checkbox"/> A revision of the PoA-DD is not required (in | |

| | | | |
|--|--|-------------------------------------|--|
| | PoA-DD and/or CPA-DD in both clean and track-change version. | <input checked="" type="checkbox"/> | case of temp. changes). |
| | The revised PoA-DD has been forwarded in (i) track-change and (ii) clean version. | | |
| | Prior Approval | | |
| | Prior approval: Assess whether the change requires prior approval of the board | <input checked="" type="checkbox"/> | The post registration change requires prior approval |
| | | <input type="checkbox"/> | The post registration change does not require prior approval |

D.7. Changes specific to afforestation and reforestation activities

| | |
|----------------------------|-----|
| Means of validation | N/A |
| Findings | |
| Conclusion | |

SECTION E. Internal quality control

Before submission of the final assessment report a technical review is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the verification team and thus not involved in the decision-making process up to the technical review.

As a result of the technical review process the assessment opinion as prepared by the validation team leader may be confirmed or revised. Furthermore, reporting improvements might be achieved.

SECTION F. Validation opinion

The below listed changes have occurred after the registration of the project / PoA.

| <i>Type of Change occurred</i> | <i>Total No. of changes</i> | <i>No. of changes which require prior approval</i> |
|---|-----------------------------|--|
| <input type="checkbox"/> Temporary deviations from the MP | - | - |
| <input type="checkbox"/> Temporary deviations from the MM | - | - |
| <input checked="" type="checkbox"/> Corrections that do not affect the project | 1 | - |
| <input type="checkbox"/> Change to the start date of the crediting p. | - | - |
| <input type="checkbox"/> Permanent changes from the MP | - | - |
| <input type="checkbox"/> Permanent changes from the MM | - | - |
| <input checked="" type="checkbox"/> Design changes to the programme or project | 2 | 2 |
| <input type="checkbox"/> Change of coordinating/managing entity | - | - |
| <input type="checkbox"/> Inclusion of monitoring plan | - | - |
| <input type="checkbox"/> Changes specific to afforestation and reforestation activities | - | - |

The above listed post registration changes require prior approval of the Board.

Nairobi, 07/06/2021



David Lubanga
TÜV NORD JI/CDM CP
Assessment Team Leader

Appendix 1. Abbreviations

| Abbreviations | Full texts |
|-------------------|---|
| CA | Corrective Action / Clarification Action |
| CAR | Corrective Action Request |
| CDM | Clean Development Mechanism |
| CER | Certified Emission Reduction |
| CL | Clarification Request |
| CO ₂ | Carbon dioxide |
| CO ₂ e | Carbon dioxide equivalent |
| CP | Certification Program |
| CPA | Component Project Activities |
| DNA | Designated National Authority |
| EB | CDM Executive Board |
| ER | Emission Reduction |
| FAR | Forward Action Request |
| FSR | Feasibility Study Report |
| GHG | Greenhouse gas(es) |
| MP | Monitoring Plan |
| MR | Monitoring Report |
| PA | Project activity |
| PCP | Project Cycle Procedure |
| PDD | Project Design Document |
| PoA | Programme of Activities |
| PP | Project Participant |
| PRC | Post Registration Changes |
| PS | Project Standard |
| QC/QA | Quality control/Quality assurance |
| TR | Technical Review |
| UNFCCC | United Nations Framework Convention on Climate Change |
| VT | Validation Team/Verification Team |
| VVS | Validation and Verification Standard |
| XLS | Emission Reduction Calculation Spread Sheet |

Appendix 2. Competence of team members and technical reviewers



Statement of Competence

Appointment and authorization according to the procedures
of the TÜV NORD JI/CDM Certification Program

Mr. David Lubanga

| SCHEME | STATUS | VALID UNTIL |
|-------------------|--|-------------|
| CDM | Senior Assessor (Validation, Verification) | 2021-10-20 |
| | Technical Reviewer | |
| VCS / ISO 14064-2 | Senior Assessor (Validation, Verification) | 2021-10-20 |
| | Technical Reviewer | |

Authorization status for technical areas within sectoral scopes:

| CODE | TECHNICAL AREA |
|------|----------------|
| 1.2 | Renewables |
| 3.1 | Energy demand |
| 13.2 | Manure |

251 - Rev. 7, Date: 2018-10-19

251_S01-VA060-F20_2018-10-19_rev7.doc

S01-VA060-F20 rev3 / 2012-10-25



Statement of Competence

Appointment and authorization according to the procedures
of the TÜV NORD JI/CDM Certification Program

Mr. Stefan Winter

| SCHEME | STATUS | VALID UNTIL |
|------------------|--|-------------|
| CDM | Senior Assessor (Validation, Verification) | 2023-07-27 |
| | Technical Reviewer | |
| VCS / ISO14064-2 | Senior Assessor (Validation, Verification) | 2023-07-27 |
| | Technical Reviewer | |

Authorization status for technical areas within sectoral scopes:

| CODE | TECHNICAL AREA |
|------|--|
| 1.1 | Thermal energy generation |
| 1.2 | Renewables |
| 2.1 | Energy distribution |
| 3.1 | Energy demand |
| 4.1 | Cement and lime production |
| 4.2 | Paper |
| 5.2 | Caprolactam, nitric and adipic acid |
| 9.1 | Aluminium and magnesium production |
| 9.2 | Iron, steel and Ferro-alloy production |
| 10.1 | Fugitive emissions from oil and gas |
| 13.1 | Solid waste and wastewater |
| 13.2 | Manure |

163 – Rev. 7, Date: 2020-07-22

163_S01-VA060-F20_2020-07-22_rev7

S01-VA060-F20 rev3 / 2012-10-25

Appendix 3. Documents reviewed or referenced

| No. | Author | Reference | Title | References to the document | Provider |
|-----|--------|-------------------|--|---|----------|
| 1. | UNFCCC | /AMS/ | AMS-III.BL: Integrated methodology for electrification of communities, version 1.0 AMS-III.AR: Substituting fossil fuel based lighting with LED/CFL lighting systems, version 5.0 | http://cdm.unfccc.int/methodologies/PAmethodologies/approved | Other |
| 2. | DOE | /CPM/ | TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms) | - | Other |
| 3. | IPCC | /IPCC/ | <ul style="list-style-type: none"> 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book | www.ipcc-nggip.iges.or.jp | Other |
| 4. | UNFCCC | /KP/ | Kyoto Protocol (1997) | http://unfccc.int/kyoto_protocol/items/2830.php | Other |
| 5. | UNFCCC | /MA/ | Decision 3/CMP. 1 (Marrakesh – Accords) | http://cdm.unfccc.int/Reference/COPMOP/index.html | Other |
| 6. | UNFCCC | /PS/ | CDM project standard for programmes of Activities (Version 02.0) | http://cdm.unfccc.int/Reference/Standards/index.html | Other |
| 7. | UNFCCC | /VVS/ | CDM validation and verification standard for programmes of activities (Version 02.0) | http://cdm.unfccc.int/Reference/Standards/index.html | Other |
| 8. | UNFCCC | /GT/ | Glossary “CDM terms” (version 10.0) | https://cdm.unfccc.int/filestorage/e/x/t/extfile-20170831165430180-Glos_CDMv9_1.pdf/Glos_CDMv9_1.pdf?t=dVV8cG85cWx3fDf_m4HXVS2HzUqLwE3VIL | Other |
| 9. | UNFCCC | /PoA-DD-F/ | Programme of activities design document form Version 9.0 | https://cdm.unfccc.int/Reference/PDDs_Forms/index.html | UNFCCC |
| 10. | PP | /PDD/ | <p>Approved Project Design Document for CDM project: “Mali Rural Electrification Program” version 09.0 dated 30/11/2017</p> <p>Revised Project Design Document for CDM project: “Mali Rural Electrification Program” version 10.0 dated 04/12/2021</p> <p>Revised Project Design Document for CDM project: “Mali Rural</p> | https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/94HDFUOPK21QL5ZGN0YMTJI7AEVXR6/view | Other |

| No. | Author | Reference | Title | References to the document | Provider |
|---------------------|----------|--------------|--|---|----------|
| | | | Electrification Program" version 11.0 dated 16/03/2021 Revised Project Design Document for CDM project: "Mali Rural Electrification Program" version 12.0 dated 22/03/2021 Revised Project Design Document for CDM project: "Mali Rural Electrification Program" version 12.0 dated 28/05/2021 | | |
| 11. | TUV NORD | /VAL/ | Validation Report for CDM programme of Activities "Mali Rural Electrification Program" version 2.0, dated 14/03/2018 | https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/94HDFUOPK21QL5ZGN0YMTJI7AEVXR6/view | Other |
| Website Used | | | | | |
| 1. | UNFCCC | /dna-HP/ | Agence de l'Environnement et du Développement Durable (AEDD) | http://www.environnement.gov.ml/ | Other |
| 2. | IPCC | /cd4cdm/ | UNEP Riso Centre | www.cd4cdm.org | Other |
| 3. | CD4CDM | /ipcc/ | IPCC publications | www.ipcc-nggip.iges.or.jp | Other |
| 4. | KTDA | /unfccc/ | UNFCCC | http://cdm.unfccc.int | Other |

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CLs from this validation

| | | | | |
|---|-----------------------|--|------------|-------------------------|
| CL ID | 01 | Section no. | A.3 | Date: 16/03/2021 |
| Description of CL | | | | |
| PoA-DD, version 10.0, section A.3, I.5 (Part II), and table 4 Please clarify if Type IV consumers are considered under CPA Type 1 | | | | |
| Project participant response (1st round) | | | | Date: 16/03/2021 |
| Statement has been revised to remove reference to Type IV consumers under CPA Type 1, and a statement has been added saying that consumer type IV are not considered under the CPA. | | | | |
| Documentation provided by project participant (1st round) | | | | |
| <input checked="" type="checkbox"/> | Changes in the PoA-DD | Section(s): | A.3 | New version No.: 11 |
| <input type="checkbox"/> | Changes in the CPA-DD | Section(s): | | New version No.: |
| <input type="checkbox"/> | Changes in MR | Section(s): | | New version No.: |
| <input type="checkbox"/> | Changes in XLS | Worksheet(s): | | New version No.: |
| <input type="checkbox"/> | Other: | | | |
| DOE assessment (1st round) | | | | Date: |
| PoA-DD, version 11.0, section A.3, I.5 (Part II), and table 4 References to Type IV consumers has been removed from A.3, and throughout the revised PoA-DD | | | | |
| Conclusion Tick the appropriate checkbox | | <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed | | |

Table 2. CARs from this validation

| | | | | |
|---|-----------------------|--|----------------------|-------------------------|
| CAR ID | 01 | Section no. | I.4 (PoA-DD Part II) | Date: 16/03/2021 |
| Description of CAR | | | | |
| PoA-DD, version 10.0, Section I.4 (generic CPA-DD Type 1) | | | | |
| 1. The table of the project boundary shall be revised to reflect the proposed changes 2. Figure 2 shall also be revised accordingly to include consumers Type I and Type II | | | | |
| Project participant response (1st round) | | | | Date: 16/03/2021 |
| 1. Table of the project boundary has been revised to reflect proposed changes. 2. Figure 2 has been revised to include consumer Types I and II. | | | | |
| Documentation provided by project participant (1st round) | | | | |
| <input checked="" type="checkbox"/> | Changes in the PoA-DD | Section(s): | I.4 (Part II) | New version No.: 11 |
| <input type="checkbox"/> | Changes in the CPA-DD | Section(s): | | New version No.: |
| <input type="checkbox"/> | Changes in MR | Section(s): | | New version No.: |
| <input type="checkbox"/> | Changes in XLS | Worksheet(s): | | New version No.: |
| <input type="checkbox"/> | Other: | | | |
| DOE assessment (1st round) | | | | Date: |
| PoA-DD, version 11.0, Section I.4 (generic CPA-DD Type 1) | | | | |
| 1. The table of the project boundary has been revised to include all consumers under the proposed changes 2. The Figure 2 has been revised to include all consumers under the proposed changes | | | | |
| Conclusion <i>Tick the appropriate checkbox</i> | | <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed | | |

Table 3. FARs from this validation

| FAR ID | xx | Section no. | Date: DD/MM/YYYY |
|--------------------------------------|----|-------------|-------------------------|
| Description of FAR | | | |
| N/A | | | |
| CME's response | | | Date: DD/MM/YYYY |
| Documentation provided by CME | | | |
| DOE assessment | | | Date: DD/MM/YYYY |

- - - -

Document information

| Version | Date | Description |
|---------|------------------|---|
| 03.0 | 31 May 2019 | Revision to: <ul style="list-style-type: none"> Ensure consistency with version 02.0 of the "CDM validation and verification standard for programmes of activities" (CDM-EB93-A08-STAN); Make editorial improvements. |
| 02.0 | 29 December 2017 | Revision to align with the requirements of the "CDM validation and verification standard for programme of activities" (version 01.0). |
| 01.0 | 5 June 2015 | Initial publication. |

| <i>Version</i> | <i>Date</i> | <i>Description</i> |
|--|-------------|--------------------|
| Decision Class: Regulatory | | |
| Document Type: Form | | |
| Business Function: Registration | | |
| Keywords: post-registration change, programme of activities, validation report | | |