

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

PUBLICATION DATE 29.06.2023 VERSION v.1.5 RELATED SUPPORT - TEMPLATE GUIDE Key Project Information & Project Design Document

This document contains the following Sections

SECTION A. DESCRIPTION OF PROJECT SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS SECTION C. DURATION AND CREDITING PERIOD SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

Appendix 1 - Safeguarding Principles Assessment (mandatory)
Appendix 2 - Contact information of project developer(s) (mandatory)
Appendix 3 - LUF Additional Information (project specific)
Appendix 4 - Design Changes

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This template has been revised to aid a consistent interpretation and to better support project developers submitting documentation for certification. Please read the accompanying guide to understand how to complete this template accurately. **TEMPLATE GUIDE Key Project Information & Project Design Document**

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KEY PROJECT INFORMATION

GS ID of Project	GS11936
Title of Project	Solar Power for Rural Regions in Nigeria
Time of First Submission Date	05/10/2022
Date of Design Certification	09/06/2023
Version number of the PDD	3.2
Completion date of version	02/02/2024
Project Developer	atmosfair gGmbH
Project Representative	atmosfair gGmbH
Project Participants and any communities involved	atmosfair gGmbH
Host Country (ies)	Nigeria
Activity Requirements applied	 Community Service Activity Renewable Energy Land-Use and Forests Activity Requirements/Risks & Capacities N/A
Scale of the project activity	 ☑ Micro scale ☑ Small Scale ☑ Large Scale
Other Requirements applied	
Methodology (ies) applied and version number	AMS-I.F.: Renewable electricity generation for captive use and mini-grid Version 05.0
Product Requirements applied	 ☐ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

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 Project Cycle:

 Regular
 Retroactive

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	Emission reductions	8,682	t CO2/a
7 Affordable and Clean Energy	Number of beneficiaries: Households (HH)	28,800	Number of HH
8 Decent Work and Economic Growth	Jobs created	248	Number of Jobs

For the first project phase. Several similar plants will be installed under the PDD. Figures are based on the first project Toto. Within the microscale limit, 20 of those installations are possible. Based on the scale of the future plants this might be less installations within the project.

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

>> atmosfair gGmbH intends to support the rural electrification in Nigeria through the implementation of several solar-hybrid (interconnected) mini grids in Nigeria.

The first project "Toto Interconnected Mini-grid" is an initiative by the Nigerian company PowerGen Renewable Energy Nigeria Limited and the German non-profit company atmosfair gGmbH to ensure over 2,000 customers in Toto, Nasarawa State have access to clean, reliable & affordable power. The project will refurbish an existing distribution grid, which is not in operation since over 2 years and will install a 350kWp PV plant and 700 kWh of lithium-ion battery storage, with additional 500kVa diesel generator as a back-up. The solar-hybrid mini-grid being developed by PowerGen in cooperation with the national grid (covering some hours of operation during the night) will be able to provide 24 hours of power per day, 7 days per week. The

interconnected mini-grid will support the economic development of the community, as businesses will be able to power their operations and run productive uses of energy, like welders or mills. Finally, the interconnected mini-grid will offer power at a lower cost than running a diesel or petrol generators to access power.

Similar projects shall be implemented all over Nigeria under this PDD. Some of the installed PV Mini-grids will use the national grid and/or diesel gen sets as a back up system and others will be independent of the national grid and/or diesel gen sets. The sizes of the installed PV plants may vary between 100 kWp and 5 MWp and the size of the batteries can be in a range from 100 kWh up to 20 MWh.

A.1.1. Eligibility of the project under Gold Standard

>> The Project is supplying electricity through the installation of a Photovoltaic plant to a group of people who live in the same area via a mini grid or regional grid or interconnected mini-grid and is therefore a Renewable Energy Activity.

No.	Eligibility Criterion	Description/ Required condition	Means of Verification/Supporting evidence for inclusion
(a) 3.1	Types of Project	3.1.1 Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are mentioned in the paragraph 2 .	The project is a renewable energy project by implementing a solar-PV plant connected to the regional grid, an interconnected Mini-Grid or Mini-Grid in combination with batter storage and the national grid and/or Diesel gensets as back up.
(b) 3.2	Location of project	Eligible projects may be located in any part of the world. To be eligible the project must be located either a a) LDC, SIDS or LLDC or b) Low Income and Low Middle-income	The project is located in Nigeria which is a Low Middle-Income country and in which the penetration rate of solar within the national grid is less than 1% ¹

¹ Nigeria_Africa_RE_SP.pdf (irena.org)

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		country where the penetration level of the proposed technology is less than 5% of the total grid installed capacity, at the time of the first submission to preliminary review.	
(c) Project 3.3 and sca	area, boundary le	Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements. a. Microscale i. RE project issuing less than or equal to 10,000 GS VERs ii	The project area are rural communities in the Republic of Nigeria. The project boundary includes the generation systems, which include several Solar-PV power plants in combination with battery energy storage systems and the distribution network (including smart metering) and the connection to the public grid.
			The project is a microscale project shall not exceed the microscale threshold issuing emission reductions less than or equal to 10,000 tCO2eq/year.
(d) Host Co Require	•	Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	The PD assures that the project is line with the Host country regulations by setting it as a requirement within the facility agreements with the project implementer. Furthermore the projects are approved by the host country government through building permits etc.
(e) Contact	: Details	As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of 7 all Project Participants; AND in case of an organisation (iii) the	The project developer is
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		legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	implementer is PowerGen Ltd. Further project implementer might be involved in the project on
(f)	Legal Ownership	Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated	ownership on the verified emission reduction based on contracts between atmosfair gGmbH and the project partner. The relevant part of the contracts will be provided. In case new project participants join the PDD,
		transparently and with full, prior and informed consent (FPIC).	the relevant documentation regarding legal ownership of VERs will be provided
(g)	Other Rights	As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example,	Nothing is known.

2 https://www.atmosfair.de/de/, info@atmosfair.de, +49 (0) 30 120 84 80-0

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		access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	
(h)	Official Development Assistance (ODA) Declaration:	All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	No ODA is involved in the project financing. PD submitted the declaration.
3.4	Suppressed demand	3.4.1 Certain Impact Quantification methodologies allow projects to account for a Suppressed Demand scenario when establishing a baseline. In such cases, the application of the Suppressed Demand baseline is limited to small scale and microscale projects.	Not relevant.
3.5	Stacking	3.5.1 A single Renewable Energy project may potentially pursue any number and combination of Certified Impact Statements or	atmosfair gGmbH has no intention to use a combination of Certified Impact Statements or Products.

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7

Products. However, certain Product Requirements, which supersede the generic requirements stated in this document can set restrictions on co-issuance of Certified Impact statements or Products. For instance, GS VERs or GS CERs with REC labels cannot be claimed for the same MWh. 3.5.2 | Where a Suppressed Demand baseline is applied, it is not allowed to 'stack' Gold Standard Certified Impact Statements or Products as the definition of the baseline may be contradictory.

A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

>> atmosfair has the legal ownership on the verified emission reduction based on the founding contract between atmosfair and the mini-grid providers. The relevant part of the contract will be provided as example from the first mini-grids.

A.2 Location of project

>> The Republic of Nigeria

The first mini-grid installed within this project is located in Toto, Nasarawa State in Nigeria (8.39587423 Latitude and 7.09946352 Longitude). Further mini-grids might be installed all over Nigeria. Their location will be specified within the monitoring reports.

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A.3 Technologies and/or measures

>> The project will deliver reliable and affordable electricity services to different communities in Nigeria from mini-grid networks. The mini-grids will generate power from renewable resources, mainly solar, with a storage system to ensure continuous availability of the services and diesel generator as a back-up source of energy to ensure reliability of supply. During their lifetime, all concessions will supply over 8,000 customers with up to 24h/7 availability. The electricity sale system may vary between the mini-grids.

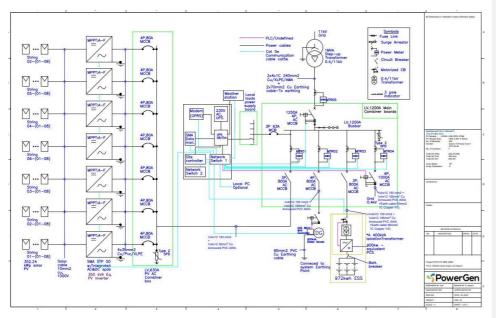
The objective is to achieve a complete and cost-effective electrification of the community in an economically and technically feasible manner. The project activity will take off with a pilot project in the village Toto, Nasarawa State. To that end, our project partner PowerGen will install a 350 kWp photovoltaic power plant and a 700-kWh battery energy storage system. PowerGen will also upgrade the existing distribution grid in Toto into a condition where it can reliably move power throughout the community.

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The list of equipment is based on the Toto mini-grid. Further mini-grids might use different equipment and sizes but of the same kind. A diesel genset and/or grid supply might be not always required.

Technical Equipment	Explanation
 Solar PV generator (Modules, mounting racks, Inverter etc.) 	The modular type is 370Wp LONGi solar mono facial panel and the model type is Longi-Solar-LR6-72PH-370M and will supplied by Give Power. The PV system is AC coupled with 7 pieces of SMA 50- 40(50kw) and has capacity to generate up to 350KVA of AC power.
	In further plants the PV generator size can be in the range between 50 kW and 3 MW.
2. Battery System	Rolls Royce will be responsible for the battery supply with a rated storage and power capacity of 972 kWh and 400 KVA. The Samsung sdi Li-Ion cells of LFP type will be used for that solution.
	In further plants the battery system size can be in the range between 50 kWh and 20 MWh.
	A 500KVA 0.4kV diesel generator and a 5000-liter fuel tank will be used.
3. Diesel Generator	In further plants the Diesel generator might be bigger or smaller or not existing.

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SLD overview of the Toto hybrid solar solution.

A.4 Scale of the project

>> The project is a microscale project. The sum of the solar-PV plants ultimately installed under this PDD will stay below the threshold of emission reductions of 10,000 tCO_2e per year and under 15 MW total capacity. If the project will be extended with further mini-grids in the future the project will not supersede the microscale threshold.

A.5 Funding sources of project

>> atmosfair gGmbH is funding parts of the mini-grids to enable their implementation. The rest of the funding is provided by equity. No ODA is involved in the funding.

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SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

>> AMS-I.F.: Renewable electricity generation for captive use and mini-grid --- Version 05.0

B.2. Applicability of methodology (ies)

>>			
Applicability no.	Explanation		
2.2.3 (a) Install a new power plant at a site where there was no renewable energy power plant operating	This project involves (a)installing a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); thus, this methodology is applicable to this project activities.		
	The new hybrid mini-grid supplies electricity to a mini-grid		
	system where in the Baseline all generators would use		
2.2.4 situations under	exclusively diesel fuel or displaces grid electricity consumption and/or captive fossil fuel electricity generation at the user en Thus, AMS-I.F is applied.		
2.2.4 situations under	and/or captive fossil fuel electricity generation at the user en Thus, AMS-I.F is applied.		
2.2.4 situations under which each of the methodology applies	and/or captive fossil fuel electricity generation at the user en Thus, AMS-I.F is applied. Project type AMS-I.F 1 Project displaces grid electricity consumption (e.g. grid import) and/co captive fossil fuel electricity generation at the user end (excess electricity may be supplied to a grid) AMS-I.A		
which each of the	and/or captive fossil fuel electricity generation at the user en Thus, AMS-I.F is applied. Project type AMS-I.A AMS-I.A AMS-I.F Project displaces grid electricity consumption (e.g. grid import) and/craptive fossil usel electricity generation at the user end (excess electricity may be supplied to a grid) AMS-I.A AMS-I.F 3 Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling) V		
which each of the	and/or captive fossil fuel electricity generation at the user end Thus, AMS-I.F is applied. ¹ Project supplies electricity to a national/regional grid ¹ Project displaces grid electricity consumption (e.g. grid import) and/or captive fossil fuel electricity generation at the user end (excess electricity may be supplied to a grid) ¹ Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling) ¹ Project supplies electricity to a wing grid'system where in the baseline all generators use exclusively via retional/cricity to a mini grid'system via retional/cricity to a mini gr		
which each of the	and/or captive fossil fuel electricity generation at the user end Thus, AMS-I.F is applied. Project type AMS-I.A AMS-I.A AMS-I.F Project supplies electricity to a national/regional grid V AMS-I.F Project displaces grid electricity consumption (e.g. grid import) and/or captive fossil tuel electricity generation at the user end (excess electricity may be supplied to a grid) V 3 Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling) V 4 Project supplies electricity or a mini grid*system where in the baseline all generators use exclusively V		

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2.2.6 retrofitting unit shall not exceed the Not of significance limit of 15 MW The components installed in this project are solar-hybrid mini-2.2.7 If the unit grids, interconnected mini-grids or PV plants integrated to the added has both DISCO's network. The new units might have both renewable renewable and nonand non-renewable components (solar/diesel), renewable renewable component in this case are solar panels. The sizes of the components, 7 the different PV plants can be in a range of 50kW and 3 MW. Not capacity of the entire all new units might have a Diesel genset and/or a grid unit shall not exceed connection. The total capacity of all new installations will be the limit of 15 MW. below the eligibility limit of 15MW for a small scale GS project activity. 2.2.8 Combined heat and power systems Not of significance are not eligible under this category 2.2.9 Hydro power plants with reservoirs following certain Not of significance conditions s are eligible to apply this methodology Within the Facility Agreement between the Gold Standard Project Developer atmosfair (the Lender) and the Project Implementer and Plant operator PowerGen it is stated: 2.2.10 If electricity 12.1.1The Parties agree that the Lender will register, hold legal is delivered to a title to, and derive all benefit from all carbon credits (including third party, a Gold Standard ("GS") Voluntary Emission Reductions ("VERs"), contract between any possible Clean Development Mechanism (CDM) Certified the supplier and Emission Reductions (CERs), any possible succession consumer(s) of the arrangements (Post-Paris Agreements), and, as the case may energy will have to be, any related commercialization rights and economic be entered that benefits) issued from the PowerGen-atmosfair Project Portfolio. ensures that there 12.1.2For the avoidance of doubt, the Borrow shall under no is no double circumstances receive revenues from carbon credits through counting of the CDM or any other formal carbon market mechanism in emission relation to the emission of carbon dioxide or greenhouse gases, reductions. or seek CDM Accreditation or accreditation in respect of any other carbon market mechanism relating to the emission of carbon dioxide or greenhouse gases.

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2.2.11 Utilization of Biomass Not of significance

B.3. Project boundary

>> The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the GS project power plant is connected to.

Sour	ce	GHGs	Included?	Justification/Explanation
ine rio	Diesel	CO ₂	Yes	Major source of emissions
Baseline scneario	Generator	CH ₄	No	No emission occur within the project baseline
Bas	Emission	N ₂ O	No	No emission occur within the project baseline
Dies Gen	Diesel Generator	CO ₂	No	As the emission reduction is just based on the installed PV plant and the electricity generated from it. The Diesel Generator emissions have been there beforehand.
	Emission	CH_4	No	No emission occur within the project scenario
		N ₂ O	No	No emission occur within the project scenario
National Grid	CO ₂	No	As the emission reduction is just based on the installed PV plant and the electricity generated from it. The national grid emissions would have occur also without the project.	
Project	Emissions	CH ₄	No	No emission occur within the project scenario
Pro		N_2O	No	No emission occur within the project scenario

B.4. Establishment and description of baseline scenario

>> The baseline scenario is the situation where, in the absence of the project activity, the local population of the rural villages have no reliable supply of electricity from a national or regional electricity grid and rely on the use of conventional energy sources relying on non-renewable fuels (diesel generator).

The project activity reduces the fuel emissions by replacing diesel generator and providing access to clean and affordable Solar-PV energy and thus, creates GHG emission reductions and helps to combat climate change. The baseline varies in this regard that some communities had no access to national grid and relied to 100% on Diesel generators and other off-grid energy sources; and other communities had an

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insufficient national grid access, so that they relied partly on Diesel generators and other off-grid sources, and partly on the national grid.

For the first installation in Toto a baseline study ("Toto AEDC Baseline and Energy Survey") has been performed and submitted. Similar studies will be submitted for further installation within the monitoring reports.

Within Toto the baseline was a following: the community was relying on diesel generators and Kerosin lamps as the existing grid was not in operation since 5 years. Within the project the grid was refurbished and a PV plant with battery storage was installed to power the community.

B.5. Demonstration of additionality

Use this table for Automatic Additionality Only – delete if N/A

Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	According to Renewable Energy Activity Requirements Version 1.3, Section 4.5.4.: An eligible Microscale project that meets the following criteria shall be deemed additional: b. The project is supplying electricity to regional or national grid; however, convincing evidence can be provided to demonstrate that project implementation will significantly improve access to electricity for the local communities, households or SMEs.
Describe how the proposed project meets the criteria for deemed additionality.	The project activity will supply clean electricity to rural communities in Nigeria through a regional grid, interconnected mini grid or mini grid. It will significantly improve access to electricity for the local communities, households and SMEs, which had no or insufficient electricity supply beforehand or since over 2 years. This is demonstrated through the baseline studies, which will be performed for each project and the households connected to the new system.

B.5.1 Prior Consideration

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>> Not applicable to regular projects.

- B.5.2 Ongoing Financial Need
- >> Not applicable to projects that are automatically deemed additional

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

SUSTAINA		SDG IMPACT
BLE DEVELOPM ENT GOALS TARGETED	SDG TARGET	INDICATOR (PROPOSED OR SDG INDICATOR)
13 Climate Action (mandator y)	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Emission reductions
	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Number of beneficiaries: Households
8 Decent Work and Economic Growth	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Jobs created

B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

>> SDG 7: Affordable and Clean Energy

Target 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services

The parameters to monitor the enabled access to affordable, reliable and clean energy services is the quantity in MWh of Solar-PV electricity consumed by the targeted

households, which is measured via smart metering systems and the number of costumers connected to the mini grid.

SDG 8: Decent Work and Economic Growth

Target 8.5. By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

The parameter to monitor the impact on employment is the number jobs created by the project activity. The number of created jobs will be monitored by the number of signed working contracts for each mini grid installed.

SDG 13: Climate Action

Target 13.2. "Integrate climate change measures into national policies, strategies and planning"

According to AMS-I.F, emission reductions are calculated as follows:

ERy=BEy-PEy-LEy

Where:

ERy = Emission reductions in year y (t CO2/y)

BEy = Baseline Emissions in year y (t CO2/y)

PEy = Project emissions in year y (t CO2/y)

LEy = Leakage emissions in year y (t CO2/y)

Baseline emissions

For a mini-grid system where all generators use exclusively fuel oil and/or diesel fuel, the baseline emissions is the annual electricity generated by the renewable energy unit times an emission factor for a modern diesel generating unit of the relevant capacity operating at optimal load as given in Table 1 of TOOL33.

Baseline emissions for other systems are the product of amount electricity displaced with the electricity produced by the renewable generating unit and an emission factor.

$$BE_{y} = EG_{BL,y} \times EF_{CO2,y}$$

Equation (1)

Equation (2)

Where:

BE_y= Baseline emissions in year y (t CO2)

 $EG_{BL,y}$ = Quantity of net electricity displaced as a result of the implementation of the GS project activity in year y (MWh)

EF_{CO2,y}= Emission factor (t CO2/MWh)

• The emission factor of an electric grid shall be calculated as per the

procedures provided in AMS-I.D.;

• For a mini-grid system other than described in paragraph 19 above,

the baseline emission factor shall be determined as per the weighted

average emissions for the current generation mix following the

procedure provided in AMS-I.D.;

Project emissions

The project emissions are 0, as just the project emissions for the following categories of project activities, including relevant definitions, shall be considered following the procedure described in the ACM0002:

(a) Emissions related to the operation of geothermal power plants (e.g. non condensable gases, electricity/fossil fuel consumption);

(b) Emissions from water reservoirs of hydro power plants.

For the other types of renewable energy projects, PEy = 0.

The CO2 emissions from on-site consumption of fossil fuels by the project activity shall be calculated using TOOL03. But as the fossil fuel source exists before the project already and as the emission reduction calculation is just focussing on the PV electricity generated and supplied to the households, the fossil fuels are not considered.

Leakage emissions

No leakage emissions occur within the project.

B.6.2 Data and parameters fixed ex ante

Copy the table for each piece of data and parameter; use headings to group parameter tables by SDG

SDG13

Data/parameter	PE,y
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Unit	t CO2/MWh
Description	Project Emission
Source of data	AMS-I.F.: Renewable electricity generation for captive use and mini-grid Version 05.0
Value(s) applied	0
Choice of data or Measurement methods and procedures	Based on the methodology PEy=0 for a solar energy project.
Purpose of data	Calculation of baseline emission
Additional comment	-

Data/parameter	LEy
Unit	t CO2/MWh
Description	Leakage Emission
Source of data	AMS-I.F.: Renewable electricity generation for captive use and mini-grid Version 05.0
Value(s) applied	0
Choice of data or Measurement methods and procedures	Based on the methodology PEy=0 for a solar energy project.
Purpose of data	Calculation of baseline emission
Additional comment	-

Data/parameter	EFCO2,y
Unit	t CO2/MWh
Description	Carbon dioxide emission factor for diesel generating system used for offgrid power generation purposes

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Source of data	AMS-I.F.: Renewable electricity generation for captive use and mini-grid Version 05.0 TOOL33: Default values for common parameters
Value(s) applied	0.8
Choice of data or Measurement methods and procedures	Diesel generator systems in the baseline scenario are 250kW and with 100% load factors.
Purpose of data	Calculation of baseline emission
Additional comment	-

Data / Parameter	EFCO2,y
Unit	T CO2/MWh
Description	Carbon dioxide emission factor for regional/national grid mix
Source of data	AMS-I.F.: Renewable electricity generation for captive use and mini-grid Version 05.0
Value(s) applied	0.573
Choice of data or Measurement methods and procedures	IGES_GRID_EF_v11.1_20230318 https://www.iges.or.jp/en/pub/list-grid-emission- factor/en
Purpose of data	Calculation of baseline emission
Additional comment	-

B.6.3 Ex ante estimation of SDG Impact

>> <u>SDG 7</u>

Through each installation several households will get access to clean and affordable energy. Through the pilot project in Toto it is estimated that 1600 households will be electrified. In the first year 800 and then from year two onwards 1600 households. Through further installations in the future more households will be electrified. Estimating 20 similar installations it would be 16000 households in the first year and 32000 households onwards.

Annual average of households electrified over CP based on pilot project: 28,800

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<u>SDG 8</u>

Based on relevant stakeholders' understanding of the operation of solar mini-grid project in Nigeria, estimation was made for the potential job created per year over the credit period. For the construction phase the amount of required job is higher than for the operation phase. The estimation was based on the first pilot project in Toto and multiplied with 20. As up to 20 similar plants could be registered under the project.

Annual average of jobs created over CP based on pilot project: 248.

<u>SDG 13</u>

Baseline emission calculation for the first project phase:

If in the baseline scenario, all generators use exclusively diesel fuel, thus the baseline emissions is the annual electricity generated by the renewable energy unit times an emission factor for a modern diesel generating unit of the relevant capacity operating at optimal load as given in Table 1 of TOOL33.

Cases	Mini-grid with 24 hour service	 (a) Mini-grid with temporary service (4 – 6 hr/day); (b) Productive applications; (c) Water pumps 	Mini-grid with storage	
	Load factors [%]			
Size	25%	50%	100%	
<15 kilowatts (kW)	1.0	0.9	0.8	
>=15 <35 kW	1.0	0.8	0.8	
>=35 <135 kW	1.0	0.8	0.8	
>=135<200 kW	0.9	0.8	0.8	
> 200 kW	0.8	0.8	0.8	

^(a) A conversion factor of 3.2 kgCO₂ per kg of diesel has been used (following 2006 IPCC Guidelines for National Greenhouse Gas Inventories)

Table 1. Emission factor for diesel generator systems (in kg CO2/kWh)

The diesel generator system consists of generators with capacity of 250kW, and operates with 100% load. Thus, the emission factor for the diesel generating system in the baseline scenario is 0.8 t CO2/MWh.

Baseline emissions:

$$BE_{v} = EG_{BL,v} \times EF_{CO2,v} = 10853 \times 0.8 = 8682 t CO2$$

In the case where the project baseline includes electricity supply through the national grid, the emission factor used will be 0.573 tCO2/MWh for the share of electricity provided by the national grid. The calculation for a 100% share of national grid in the baseline, would look as follow:

$$BE_y = EG_{BL,y} \times EF_{CO2,y} = 10853 \times 0.573 = 6218 t CO2$$

The project portfolio included within the PDD and such the share of projects which are replacing exclusively diesel fuel and the share of the ones displacing national grid electricity is not known yet. So for the estimated emission reduction declared within the PDD we decided to use the case with the highest baseline emissions, which would be that all projects are replacing exclusively diesel fuel.

Project emission calculation:

The project activity reduces the fuel emissions by replacing diesel generator with Solar-PV energy. Thus PEy=0.

Leakage emission:

There's no leakage emission under project scenario. No activities utilizing biomass and/or biomass residues is involved in this project. Solar energy in this project acts as substitution only for unsustainable electricity generated by diesel fuel in the baseline scenario. Thus, emissions from the grid supply source and back-up diesel generator are not included in the leakages.

Emission reduction:

ER,y=BE,y-PE,y-LE,y= 8682-0-0=8682 t CO2/a

The estimated emission reduction is calculated using aggregated data from first installed project multiplied by 20 similar plants. The sum of the solar-PV plants ultimately installed under this PDD will stay below the threshold of emission reductions of $10,000 \text{ tCO}_2\text{e}$ per year.

B.6.4 Summary of ex ante estimates of each SDG Impact

Figures below are based on the first installation Toto multiplied with 20, as within the microscale limit, 20 of those installations are possible. Based on the scale of the real installations this might be less installations within the project.

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	0	16,000	16,000
Year 2	0	32,000	32,000
Year 3	0	32,000	32,000
Year 4	0	32,000	32,000
Year 5	0	32,000	32,000

<u>SDG 7</u>

Year n (delete if N/A)

Total	0	144,000	144,000	
Total number of crediting years	5			
Annual average over the crediting period	0	28,800	28,800	Kommentiert [CCIPL-QR1]: Kindly check the total value, and rectify Kommentiert [NE2R1]: PD corrected

<u>SDG 8</u>

YEAR		BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	0		840	840
Year 2	0		100	100
Year 3	0		100	100
Year 4	0		100	100
Year 5	0		100	100
Year n (delete if N/A)				
Total	0		1,240	1,240
Total number of crediting years	5			
Annual average over the crediting period	0		248	248

<u>SDG 13</u>

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	8,176	0	8,176
Year 2	8,176	0	8,176
Year 3	8,329	0	8,329
Year 4	9,141	0	9,141
Year 5	9,588	0	9,588
Year n (delete if N/A)			
Total	43,411	0	43,411

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Total number of crediting years 5	Total	number	of	crediting	years	5
-----------------------------------	-------	--------	----	-----------	-------	---

Annual average over the crediting	9 692	0
period	0,002	0

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

For the first project phase. Several similar plants will be installed under the PDD. Figures are based on the first project Toto multiplied with 20, as within the microscale limit, 20 of those installations are possible.

SDG 13

Data / Parameter	EGPJ,y
Unit	MWh
Description	Quantity of net electricity displaced as a result of the implementation of the GS project activity in year y
Source of data	Smart meter
Value(s) applied	10853
Measurement methods and procedures	An electricity meter shall be installed as part of the project activity to measure total gross electricity supplied to all connected consumers (new and existing) from the project renewable electricity generation system. For new mini-grid construction, the metering can be at the mini-grid plant itself. For mini-gird extension, this can be at the substation from which the electrification project is supplied

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Climate Security and Sustainable Development

8,682

Monitoring frequency	Continuous monitoring, hourly measurement and at least monthly recording
QA/QC procedures	-
Purpose of data	Calculation of SDG 13
Additional comment	-

Data / Parameter	Change of used batteries and modules
Unit	#
Description	Number of changed batteries and whether they are taken back by the ESS supplier
Source of data	Data base of the local project partner
Value(s) applied	
Measurement methods and procedures	The number of changed and recycled batteries is administered by the local project partner
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	Calculation of SDG 13 outcome
Additional comment	-

SDG 8

Data / Parameter	Job creation
Unit	#
Description	Number of jobs created by the project activity
Source of data	Data base of the local project partner
Value(s) applied	248
Measurement methods and procedures	The number of signed working contracts is administered by the local project partner
Monitoring frequency	Annually
QA/QC procedures	-

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Purpose of data Additional comment Calculation of SDG 8 outcome

SDG 7

Data / Parameter	Households electrified
Unit	#
Description	Number of households electrified by the project activity
Source of data	Data base of the local project partner
Value(s) applied	28,800
Measurement methods and procedures	The number of connected households to the mini-grid monitored by the local project partner
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	Calculation of SDG 7 outcome
Additional comment	-

B.7.2 Sampling plan

>> No sampling approach needed, since the data of the Solar-PV power plants are continuously recorded via smart metering.

B.7.3 Other elements of monitoring plan

>> The local plant operator, as e.g PowerGen, is tracking all generation units and the demand of the customers via smart meters, as well as the amióunt and kind of connections. The technical operation manager is tracking those data and is summarizing them in a monthly or quarterly report. This reports are send to the responsible project manager at atmosfair. Once a year the technical operation manager is reporting the amount of employed staff within the project to the responsible project manager at atmosfair. The responsible project manager is using those information for the annual montoring reports.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project >> 19/11/2021 purchase of some main equipment

- C.1.2 Expected operational lifetime of project
- >> 20 years

C.2. Crediting period of project

- C.2.1 Start date of crediting period
- >> 01/06/2023; expected commissioning date of the mini grid
- C.2.2 Total length of crediting period
- >> 5 years, twice renewable

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in <u>Appendix 1</u>, ongoing monitoring is summarised below.

PRINCIPLES	MITIGATION MEASURES ADDED TO THE MONITORING PLAN
Hazardous waste	Annual check, whether a module or a battery need to be
	replaced, if so they will be recycled and changed.

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?

The project follows the guidelines and requirements of gender-sensitive design and implementation as outlined in the gender policy. The purpose of the project is not only the mitigation of climate change, but also the provision of access to clean and affordable solar energy from which all genders will benefit equally. The access to clean energy enables

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	households, thereby especially women	
	and children, to substitute e.g. unhealthy	
	kerosene lamps by electrical lighting.	
	Furthermore, women will have the	
	possibility to find employment through	
	this project, as the access to reliable	
	electricity will boost local economy and	
	especially small and medium business run	
	by women;	
	The project activity aligns with Republic of	
	Nigerias official gender policy. The Article	
	2 of the Constitution of Republic of	
	Nigeria prohibits any discrimination based	
	on social origin, colour, language, race,	
Question 2. Evaluin how the preject	sex, religion, or political opinion.	
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	Furthermore, Republic of Nigeria has	
	signed and ratified the Convention on the	
	Elimination of All Forms of Discrimination	
	against Women (CEDAW) with which the	
	project aligns as well.	
	colour, language, race, sex, religion, or	
	political opinion is prohibited".	

Question 3 - Is an Expert required for the Gender Safeguarding Principles & No Requirements?

Question 4 - Is an Expert required to assist with Gender issues at the No Stakeholder Consultation?

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

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The local Stakeholders consultation (LSC) was conducted by Powergen and atmosfair on Saturday 18th September, 2021 in Kotomassa Hall Toto Community, Nasarawa State and the project development and sustainability goals were presented to the local stakeholders.

E.1 Summary of stakeholder mitigation measures

>> No stakeholder expressed any alterations into the project. The following questions were raised and answered during the LSC meeting.

• Q1. One participant asked about the price of the meter to be supplied by PowerGen.

A: The response was, it will be supplied for free to each household or business premises

 Q2: Alh. Musa Mohammed Maikaya asked two questions, firstly, he asked how the issue of spark or fire outbreak due to improper wiring would be managed. Secondly, he wanted to know how PowerGen would tackle new locations which do not have poles?

A: In response to the first question, Mr John from PowerGen stated that licensed electrical engineers would be used for the wiring of all houses and business premises. In addition, Powergen would have an Operation and Maintenance team on ground upon commencement of operations in Toto. In response to the second question, he said poles will be put in new areas as long as there are households, public premises or businesses available within such locations.

• Q3: Another question was on the commencement date of the Project and its possible realization in Toto.

A: The project will start in January 2022 and it will be commissioned in May, 2022. He confirmed that the project will be a reality citing examples of projects executed by PowerGen in different communities within Niger State.

• Q4: Hajiya. Tasala Usman asked if the electricity supplied by PowerGen could be used for grinding machines?

A: The response was yes, PowerGen might offer the option to change the diesel or fuel engine to electric motors by retrofitting it and the customers will make monthly payment for the machine supplied to them by PowerGen.

• Q5: Hajiya Hadiza asked what she would do with her solar panels she currently uses in her home when PowerGen begins operation in Toto?

A: The response was that the choice was hers to either use the energy supplied by PowerGen or use her own Solar Panel. She was further given assurance that she stands to benefit even more if she uses the energy supplied by PowerGen, if she was still limited by her own supply.

- Q6: Malam. Yusuf Adamu Omehi Youth Leader inquired whether PowerGen customers could use the same electrical appliances as that of AEDC.
 A: The response was that all electrical appliances used as an AEDC customer can also be used as a PowerGen customer.
- Q7: Hajiya Ramatu Rabiu appealed for electrical appliances and special machines such as Refrigerators, Welding machines, Grinding & Milling Machines be brought into the community once PowerGen commences operation in Toto. She also assured the company of the total support of all the women in Toto Community.

A: the option for assistance will be looked into.

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
Continuous Input / Grievance Expression Process Book (mandatory)	Location: Power Station, beside Toto Local Government Office Toto Community Nasarawa State
GS Contact (mandatory)	help@goldstandard.org
Telephone Access	PowerGen call centre line +09062230934 and The Gold Standard Foundation: +41 22 788 7080
Internet / Email Access	PowerGen: customersNG@powergenre.com The Gold Standard Foundation: info@goldstandard.org Atmosfair gGmbH zavisic@atmofair.de

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APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into <u>SECTION D</u> above. Please refer to the instructions in the <u>Guide to Completing</u> this Form.

SOCIAL SA	FEGUARDING PRINCIPLES	
Reference requirement	Question	Response
FEHLER! VER	RWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEH	LER!
VERWEISQU	ELLE KONNTE NICHT GEFUNDEN WERDEN.	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	□ YES ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	□ YES ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does this project undermine national or regional measures for the realisation of the right to development?	□ YES ⊠ NO

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If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements. Please add text here ... Would the project potentially involve or lead to: FEHLER! VERWEISO □ YES adverse impacts on enjoyment of the human rights (civil, UELLE □ POTENTIALLY political, economic, social or cultural) of the affected KONNTE NICHT population and particularly of marginalised groups? 🛛 NO GEFUNDEN WERDEN. FEHLER! VERWEISO inequitable or discriminatory impacts on affected □ YES UELLE populations, particularly people living in poverty or □ POTENTIALLY KONNTE marginalised or excluded individuals or groups, including **NICHT** ⊠ NO persons with disabilities? GEFUNDEN WERDEN. FEHLER! VERWEISQ □ YES UELLE restrictions in availability, quality of and/or access to □ POTENTIALLY resources or basic services, in particular to marginalised **KONNTE** NICHT individuals or groups, including persons with disabilities? 🛛 NO GEFUNDEN WERDEN. FEHLER! VERWEISO □ YES UELLE exacerbation of conflicts among and/or the risk of violence □ POTENTIALLY KONNTE to project-affected communities and individuals? **NICHT** ⊠ NO **GEFUNDEN** WERDEN. Briefly describe below how the project incorporates a human rights-based approach. For example, by describing how the project design: is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures) includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher) enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the nondiscrimination and equality human rights principle) provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities. The proposed project activity does not violate any human rights or discriminates against people based on their race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or

geographical origin, property, birth or other status including indigenous person or

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member of a minority. The project participants respect and follow internationally proclaimed human right declarations like the Universal Declaration of human rights.

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER!		
VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project undermine the principles of non- discrimination, equal treatment, and equal pay for equal work?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	□ YES ⊠ NO

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KONNTE		
NICHT GEFUNDEN WERDEN.		
	to any of the questions above is "yes," please explain the rea nsure compliance with applicable requirements. <i>xt here</i>	ison and how the
Nould the pro	oject potentially involve or lead to:	
FEHLER! VERWEISO JELLE KONNTE NICHT GEFUNDEN WERDEN.	adverse impacts on gender equality and/or the situation of women and girls?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO JELLE KONNTE NICHT GEFUNDEN WERDEN.	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISQ UELLE KONNTE NICHT GEFUNDEN WERDEN.	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	□ YES □ POTENTIALLY ⊠ NO
and women's	be below how the project is addressing any identified risk to g empowerment. ct activity will increase access of vulnerable communitie	

1. The project activity will increase access of vulnerable communities to clean and affordable energy services. The project does not increase women's workload. On the contrary, it reduces the efforts to organize access to conventional energy sources.

Thus, no risks or issues are expected from our project concerning this principle. 2. The project design creates equal possibilities for women and men to participate in the project and consultation process. Non-discrimination, equal treatment and

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equal pay for equal work are core principles of the project. Any gender is invited to apply for the jobs created by the project.

3. The project activity aligns with Nigeria's official gender policy. The Article 2 of

the Constitution of Nigeria prohibits any discrimination based on social origin, color, language, race, sex, religion, or political opinion. Furthermore, Nigera has signed

and ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) with which the project aligns as well.

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve any potential risks to the workers' safety and health?	□ YES ⊠ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Please add text here....

Would the project potentially involve or lead to:

FEHLER! VERWEISO UELLE KONNTE	construction and/or infrastructure development (e.g., roads, buildings, dams)?	□ YES
<u>NICHT</u> GEFUNDEN WERDEN.		⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	□ YES □ POTENTIALLY

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<u>KONNTE</u> <u>NICHT</u> <u>GEFUNDEN</u> WERDEN.		⊠ NO		
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	□ YES □ POTENTIALLY ⊠ NO		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	□ YES ⊠ POTENTIALLY □ NO		
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	□ YES □ POTENTIALLY ⊠ NO		
Briefly describe below how the project is addressing any identified risk related to community health and safety.				
Damaged ba	tteries or solar panels that need to be replaced will be re	ecycled.		
FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.				
	RWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEH ELLE KONNTE NICHT GEFUNDEN WERDEN.	<u>LER!</u>		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	□ YES ⊠ NO		
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.				
Please add text here				
Would the project potentially involve or lead to:				
FEHLER! VERWEISO	activities adjacent to or within a cultural heritage site?	□ YES □ POTENTIALLY		

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UELLE		□ NO
<u>KONNTE</u> NICHT		
GEFUNDEN		
WERDEN.		
<u>FEHLER!</u> VERWEISO	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	YES POTENTIALLY
UELLE	nooding of other environmental enanges.	-
KONNTE		⊠ NO
NICHT CEEUNDEN		
<u>GEFUNDEN</u> WERDEN.		
FEHLER!	alterations to landscapes and natural features with cultural	□ YES
VERWEISO	significance?	□ POTENTIALLY
<u>UELLE</u> KONNTE		⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
<u>FEHLER!</u> VERWEISO	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or	YES POTENTIALLY
UELLE	intangible forms of culture (e.g., knowledge, innovations,	-
KONNTE	practices)? (Note: projects intended to protect and	⊠ NO
<u>NICHT</u> GEFUNDEN	conserve Cultural Heritage may also have inadvertent adverse impacts)	
WERDEN.	adverse impacts)	
FEHLER!	utilisation of tangible and/or intangible forms (e.g.,	□ YES
VERWEISO	practices, traditional knowledge) of Cultural Heritage	□ POTENTIALLY
<u>UELLE</u> KONNTE	for commercial or other purposes?	⊠ NO
NICHT		
GEFUNDEN		
WERDEN. FEHLER!		
VERWEISQ		
UELLE	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the	⊠ NA
KONNTE	law, scope and nature of proposed development and its	
<u>NICHT</u> GEFUNDEN	potential consequences?	
WERDEN.		
FEHLER!		□ YES
VERWEISO	If answer to question above is "YES" - does the project	
<u>UELLE</u> KONNTE	provide equitable sharing of benefits from	⊠ NA
NICHT	commercialisation of such knowledge, innovation, or	
GEFUNDEN	practice, consistent with their customs and traditions?	
WERDEN.		

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FEHLER!	If answer to question above is "YES" - are opinions and	□ YES
VERWEISO	recommendations of an Expert Stakeholder(s) not sought	□ NO
UELLE	and demonstrated as being included in the project design?	⊠ NA
KONNTE		
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	If answer to question above is "YES", has project design	□ YES
VERWEISQ	been changed, modified, updated considering opinions and	□ NO
UELLE	recommendations of an Expert Stakeholder?	⊠ NA
KONNTE		
NICHT		
GEFUNDEN		
WERDEN.		
If the answer	is "yes" or "potentially" to any of the above questions, please	e provide a brief
	the project situation below. Also, provide justification and/or	evidence as
necessary to	demonstrate compliance with applicable requirements.	
Please add te	xt here	
	RWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEH	I FRI
	ELLE KONNTE NICHT GEFUNDEN WERDEN.	
FEHLER!		
VERWEISO		
UELLE		
KONNTE	Does the project involve any risks related to involuntary	□ YES
NICHT	relocation of people?	🗵 NO
GEFUNDEN		
WERDEN.		
	to question above is "yes," please explain the reason and how	w the project will
	iance with applicable requirements.	
Please add te		
Would the pro	oject potentially involve or lead to:	
FEHLER!	risk of forced evictions or involuntary relocation of people?	□ YES
VERWEISO		POTENTIALLY
UELLE		
KONNTE		⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	temporary or permanent and full or partial physical	□ YES
VERWEISO	displacement (including people without legally recognisable	POTENTIALLY
UELLE	claims to land)?	
KONNTE		⊠ NO
NICHT		
		1
GEFUNDEN		
<u>GEFUNDEN</u> WERDEN.		

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FEHLER!	economic displacement (e.g., loss of assets or access to	□ YES
VERWEISO	resources due to land acquisition or access restrictions -	POTENTIALLY
<u>UELLE</u> KONNTE	even in the absence of physical relocation)?	⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	If answer to question above is "YES" or "POTENTIALLY",	□ YES
VERWEISQ	- has the project developed Resettlement Action Plan	□ NO
<u>UELLE</u> KONNTE	or Livelihood Action Plan in consultation and	🖂 NA
NICHT	agreement with affected individual, group or	
GEFUNDEN	community?	
WERDEN.	 has the project integrated Resettlement Action Plan 	
	or Livelihood Action Plan into the Project design?	
FEHLER!	If answer to question above is "YES" - are opinions and	□ YES
VERWEISO	recommendations of an Expert Stakeholder(s) not sought	□ NO
<u>UELLE</u> KONNTE	and demonstrated as being included in the project design?	🖾 NA
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	If answer to question above is "YES", have project design	□ YES
VERWEISO UELLE	been changed, modified, updated considering opinions and	□ NO
KONNTE	recommendations of an Expert Stakeholder?	🖾 NA
NICHT		
GEFUNDEN		
WERDEN.		
	is "yes" or "potentially" to any of the above questions, please	
	the project situation below. Also, provide justification and/or	evidence as
	demonstrate compliance with applicable requirements.	
Please add te	xt nere	
	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	N.FEHLER!
-	UELLE KONNTE NICHT GEFUNDEN WERDEN.	
FEHLER!	Does the project involve any risks related to identifying and	□ YES
VERWEISO	managing legitimate tenure rights that may be affected by	⊠ NO
UELLE	the project?	
KONNTE NICHT		
GEFUNDEN		
WERDEN.		
	to question above is "yes," please explain the reason and how	w the project will
	iance with applicable requirements.	and project will
Please add te		
ricase add te		
Would the pro	pject potentially involve or lead to:	
CENI EDI	impacts on or changes to land tonurs arrangements and/or	

VERWEISO	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	YES POTENTIALLY
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<u>KONNTE</u> <u>NICHT</u> <u>GEFUNDEN</u> WERDEN.		⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	□ YES □ NO □ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	□ YES □ NO ⊠ NA
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	□ YES □ NO ⊠ NA

Gold Standard

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. *Please add text here....*

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

VERWEISQ	OLLEE KONNTE MICHT GET ONDEN WERDEN.	
FEHLER! VERWEISO		
UELLE KONNTE NICHT GEFUNDEN	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	□ YES ⊠ NO
WERDEN.		

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here....

Would the project potentially involve or lead to:

-		
FEHLER!	affect areas where indigenous peoples are present	□ YES
<u>VERWEISQ</u> UELLE	(including project area of influence)	□ POTENTIALLY
KONNTE		⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	affect areas, land and territory claimed by indigenous	□ YES
VERWEISO	peoples?	□ POTENTIALLY
<u>UELLE</u> KONNTE		⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	impacts (positive or negative) to the human rights, lands,	□ YES
VERWEISO	natural resources, territories, and traditional livelihoods of	□ POTENTIALLY
<u>UELLE</u> KONNTE	indigenous peoples?	⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	If answer to above questions is "YES" or "POTENTIALLY",	□ YES
VERWEISO	 Is it determined that the proposed project may 	□ NO
UELLE	affect the rights, lands, resources, or territories of	🖂 NA
KONNTE NICHT	indigenous people?	
GEFUNDEN	 Has an "Indigenous People Plan" (IPP) or 	
WERDEN.	"Indigenous People Plan Framework" been	
	elaborated and included in the project	
_	documentation?	

Gold Standard

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	 Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines? 	
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	risk of forcibly removing indigenous people from their lands and territories?	□ YES □ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	 If answer to question above is "YES" or "POTENTIALLY" Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ? Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing? 	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	□ YES □ NO ⊠ NA

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FEHLER! VERWEISO	Are opinions and recommendations of an Expert	□ YES
<u>UELLE</u> KONNTE	Stakeholder(s) not sought and demonstrated as being	
NICHT	included in the project design?	⊠ NA
<u>GEFUNDEN</u> WERDEN.	······································	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	□ YES □ NO ⊠ NA
If the answer description of	is "yes" or "potentially" to any of the above questions, please the project situation below. Also, provide justification and/or demonstrate compliance with applicable requirements.	· ·
Please add te		
	RWEISOUELLE KONNTE NICHT GEFUNDEN WERDEN.FEH	LEDI
	ELLE KONNTE NICHT GEFUNDEN WERDEN.FEH	LLK!
	ELLE KONNTE NICHT GEFONDEN WERDEN.	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	□ YES ⊠ NO
If the answer	to any of the questions above is "yes," please explain project	situation and
how the proje	ect will ensure compliance with applicable requirements.	
Please add te	xt here	
	ECONOMIC SAFEGUARDING PRINCIPLES	
FEHLER! VER	RWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEH	LER!
VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.		
FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER!		
VERWEISO	UELLE KONNTE NICHT GEFUNDEN WERDEN.	
FEHLER!		

Gold Standard

GEFUNDEN WERDEN.		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project violate national laws, if available regarding non-discrimination in employment?	□ YES ⊠ NO
FEHLER! VERWEISQ UELLE KONNTE NICHT GEFUNDEN FEHLER! VERWEISQ UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project allow child labor?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLER! VERWEISO UELLE	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	□ YES ⊠ NO

Gold Standard

<u>KONNTE</u> <u>NICHT</u> <u>GEFUNDEN</u> <u>WERDEN.</u>		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	□ YES □ NO
FEHLER! VERWEISQU ELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	□ YES ⊠ NO
If the answer	to any of the questions above is "yes," please explain project	situation and
	ect will ensure compliance with applicable requirements.	
Please add te	xt here	
Would the pro	pject potentially involve or lead to:	
	LIES TO BOTH PROJECT AND CONTRACTOR WORKERS)	
FEHLER! VERWEISO	use of forced labour?	□ YES □ POTENTIALLY
<u>UELLE</u> KONNTE		⊠ NO
NICHT		
GEFUNDEN		
WERDEN.	working conditions that do not meet national labour laws	
<u>WERDEN.</u> FEHLER! VERWEISO	working conditions that do not meet national labour laws and international commitments?	YES POTENTIALLY
FEHLER! VERWEISO UELLE		D POTENTIALLY
FEHLER! VERWEISO UELLE KONNTE		_
FEHLER! VERWEISO UELLE		D POTENTIALLY
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	and international commitments?	□ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI	and international commitments? working conditions that may deny freedom of association	□ POTENTIALLY ☑ NO □ YES
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	and international commitments?	□ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI VERWEISO UELLE KONNTE	and international commitments? working conditions that may deny freedom of association	□ POTENTIALLY ☑ NO □ YES
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN	and international commitments? working conditions that may deny freedom of association	 □ POTENTIALLY ☑ NO □ YES □ POTENTIALLY
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI VERWEISO UELLE KONNTE NICHT	and international commitments? working conditions that may deny freedom of association	 □ POTENTIALLY ☑ NO □ YES □ POTENTIALLY
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI VERWEISO WERDEN. FEHLERI VERWEISO	and international commitments? working conditions that may deny freedom of association and collective bargaining?	 □ POTENTIALLY ☑ NO □ YES □ POTENTIALLY ☑ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI VERWEISO WERDEN. FEHLERI VERWEISO UELLE	and international commitments? working conditions that may deny freedom of association and collective bargaining? absence of documented working agreements with all individual workers	 POTENTIALLY NO YES POTENTIALLY № NO YES POTENTIALLY POTENTIALLY
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLERI VERWEISO WERDEN. FEHLERI VERWEISO	and international commitments? working conditions that may deny freedom of association and collective bargaining? absence of documented working agreements with all	 □ POTENTIALLY ☑ NO □ YES □ POTENTIALLY ☑ NO □ YES

Gold Standard

FEHLER!	use of migrant workers?	□ YES
VERWEISO		POTENTIALLY
UELLE	if engaged, the developer shall ensure that they are	
KONNTE	engaged substantially equivalent terms and conditions to	⊠ NO
NICHT	non-migrant workers carrying out similar work.	
GEFUNDEN		
WERDEN.		
FEHLER! VERWEISO	having no arrangements for basic services ³ for workers?	□ YES
UELLE		POTENTIALLY
KONNTE	the project developer shall put in place and implement	⊠ NO
NICHT	policies on the quality and management of the	
GEFUNDEN	accommodation and provision of basic services in a manner	
WERDEN.	consistent with the principles of non-discrimination and	
	equal opportunity. Workers' accommodation arrangements	
	should not restrict workers' freedom of movement or of	
FEHLER!	association any form of discrimination or harassment based on factors	□ YES
VERWEISO	unrelated to job requirements, such as gender, race,	
UELLE	nationality, ethnicity, social or indigenous origin, religion or	□ POTENTIALLY
KONNTE	belief, disability, age, or sexual orientation?	⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	any form of discrimination in any aspect of employment,	□ YES
VERWEISO	such as recruitment, compensation, working conditions,	□ POTENTIALLY
UELLE	training, job assignment, promotion, termination, or	⊠ NO
KONNTE NICHT	discipline?	
GEFUNDEN		
WERDEN.		
FEHLER!	harassment, intimidation, and/or exploitation, especially in	□ YES
VERWEISO	regard to women?	
UELLE		
KONNTE		⊠ NO
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to	□ YES
<u>VERWEISO</u> UELLE	address non-discrimination in employment?	□ POTENTIALLY
KONNTE	address for discrimination in employment:	⊠ NO
NICHT		-
GEFUNDEN		
WERDEN.		

Gold Standard

³ Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

FEHLER! VERWEISO UELLE	use of child labour? (including third-party engaged workers)	□ YES □ POTENTIALLY
KONNTE NICHT GEFUNDEN WERDEN.		⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	inadequate and verifiable mechanisms for age verification?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	no processes and measures in place for the safety and health of project workers?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	□ YES ⊠ NO
FEHLER! VERWEISQU ELLE KONNTE NICHT GEFUNDEN WERDEN.	No grievance mechanism available for workers to voice workplace concerns.	□ YES ⊠ NO

Gold Standard

FEHLER! VERWEISQU ELLE KONNTE	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	□ YES ⊠ NO
<u>NICHT</u> <u>GEFUNDEN</u> WERDEN.		
If the answer	is "yes" or "potentially" to any of the above questions, please	e provide a brief
description of	the project situation below. Also, provide justification and/or	evidence as
necessary to	demonstrate compliance with applicable requirements.	
Please add te	xt here	
	RWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	EN.FEHLER!
-	<u>UELLE KONNTE NICHT GEFUNDEN WERDEN.</u>	
FEHLER!		□ YES
VERWEISO		🛛 NO
<u>JELLE</u> K <u>ONNTE</u> NICHT	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	
GEFUNDEN	lesources:	
WERDEN.		
FEHLER!		□ YES
VERWEISO		⊠ NO
JELLE		× NO
KONNTE	Does the project have potential negative impacts or pose a risk to the local economy?	
NICHT	Tisk to the local economy?	
GEFUNDEN		
WERDEN.		
FEHLER!		□ YES
VERWEISO		🛛 NO
<u>UELLE</u> KONNTE	Are there any potential risks or negative impacts this	
NICHT	project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	
GEFUNDEN	groupe, adopted the sensition terms, single	
WERDEN.		
If the answer	to any of the questions above is "yes," please explain project ect will ensure compliance with applicable requirements.	situation and
Please add te		
Would the p	roject involve or lead to:	
FEHLER!	economic impacts (negative/detrimental) to the local	□ YES
VERWEISO	economy?	D POTENTIALLY
UELLE		⊠ NO
KONNTE		

KONNTE NICHT GEFUNDEN WERDEN.

Gold Standard Climate Security and Sustainable Development

FEHLER!	negative economic consequences during and after project	□ YES	
VERWEISO	implementation, e.g., for vulnerable and marginalised social	POTENTIALLY	
UELLE	groups in targeted communities?		
KONNTE		⊠ NO	
NICHT			
GEFUNDEN			
WERDEN.			
If the answer	is "yes" or "potentially" to any of the above questions, please	provide a brief	
	the project situation below. Also, provide justification and/or		
	demonstrate compliance with applicable requirements.		
Please add te			
FEHLER! VI	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	N.FEHLER!	
	UELLE KONNTE NICHT GEFUNDEN WERDEN.		
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	UELLE KONNTE NICHT GEFUNDEN WERDEN.	IN IT LITELN:	
-	OELLE KONNTE NICHT GEFUNDEN WERDEN.		
FEHLER!			
VERWEISO			
UELLE	Does the project have a risk of increasing greenhouse gas	□ YES	
KONNTE	emissions over the Baseline Scenario?	NO NO	
NICHT			
GEFUNDEN			
WERDEN.			
	to question above is "yes," please explain project situation ar	nd how the	
project will er	nsure compliance with applicable requirements.		
Please add te	xt here		
would the pro	oject involve or lead to:		
FEHLER!			
VERWEISO			
UELLE		□ YES	
KONNTE	increase greenhouse gas emissions over the Baseline	□ POTENTIALLY	
NICHT	Scenario?	⊠ NO	
GEFUNDEN			
WERDEN.			
If the answer	is "yes" or "potentially" to the above question, please provide	e a brief	
description of the project situation below. Also, provide justification and/or evidence as			
	demonstrate compliance with applicable requirements.		
Please add te			
FEHLER! VI	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	N.FEHLER!	
	UELLE KONNTE NICHT GEFUNDEN WERDEN.		
- EIGHEISQ			

Gold Standard

FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project pose a risk to the availability and reliability of energy supply to other users?	□ YES ⊠ NO
If the answer	to question above is "yes," please explain project situation ar	nd how the
	sure compliance with applicable requirements.	
Please add te.		
Would the pro	oject involve or lead to:	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	negative impact on the availability and reliability of energy supply to other users?	□ YES □ POTENTIALLY ⊠ NO
	is "yes" or "potentially" to the above question, please provide	h a brief
	the project situation below. Also, provide justification and/or	
	demonstrate compliance with applicable requirements.	evidence as
Please add te.	xt here RWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN. FEH	ILEDI
	UELLE KONNTE NICHT GEFUNDEN WERDEN.	
	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	
	UELLE KONNTE NICHT GEFUNDEN WERDEN.	INTELLER:
-	OLLEE KONNTE MICHT GEFONDEN WERDEN.	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	□ YES ☑ NO

Gold Standard

KONNTE NICHT		
GEFUNDEN		
WERDEN.		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	□ YES ⊠ NO
If the answer to any of the questions above is "yes," please explain project situation and		
how the proje	ect will ensure compliance with applicable requirements.	
Please add te	xt here	

Would the project involve or lead to:

FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	□ YES □ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	□ YES □ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	□ YES □ NO ⊠ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as		

description of the project situation below. Also, provide justification and/or evidence a necessary to demonstrate compliance with applicable requirements.

Please add text here....

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FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER!		
VERWEISQ	UELLE KONNTE NICHT GEFUNDEN WERDEN.	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	□ YES ⊠ NO
	to question above is "yes," please explain project situation ar	nd how the
Please add te	nsure compliance with applicable requirements.	
ricuse aud le	At nore	
Would the pro	oject involve or lead to:	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN. FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	negatively impact on the catchment area? If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.	□ YES □ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	□ YES □ NO ⊠ NA
description of	is "yes" or "potentially" to any of the above questions, please the project situation below. Also, provide justification and/or demonstrate compliance with applicable requirements.	

Please add text here....

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

Gold Standard

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER!			
VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.			
FEHLER!			
VERWEISO			
UELLE			
KONNTE	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?		
NICHT	ecosystem services provided by soils in the project?		
GEFUNDEN	76		
WERDEN.	If yes, the project shall maintain healthy soils by minimising	□ YES	
-	negative impacts on soil health, productivity, structure, and	⊠ NO	
FEHLER!	water retention. Steps to minimise soil degradation include		
VERWEISO	crop rotation, composting, using N-fixing plants, and		
<u>UELLE</u> KONNTE	reducing tillage and ecologically harmful substances.		
NICHT			
GEFUNDEN			
WERDEN.			
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			

Please add text here....

Would the project involve or lead to:

FEHLER! VERWEISO	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	□ YES □ POTENTIALLY
<u>UELLE</u> KONNTE	communities:	⊠ NO
<u>NICHT</u> <u>GEFUNDEN</u> WERDEN.		
-		
FEHLER!	if answer to above question "yes" or "potentially", does	□ YES
<u>VERWEISO</u> UELLE	project adopt appropriate and culturally sensitive sustainable resource management practices?	□ NO
KONNTE		⊠ NA
NICHT		
<u>GEFUNDEN</u> WERDEN.		

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Please add text here....

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

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FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	□ YES ⊠ NO	
	to question above is "yes," please explain project situation ar	nd how the	
	nsure compliance with applicable requirements.		
Please add te	xt here		
Would the pro	oject involve or lead to:		
FEHLER! VERWEISQ UELLE KONNTE NICHT GEFUNDEN WERDEN.	any potential risks that require emergency preparedness and response planning?	□ YES □ POTENTIALLY ⊠ NO	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	□ YES □ NO ⊠ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. <i>Please add text here</i>			
	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE UELLE KONNTE NICHT GEFUNDEN WERDEN.	N.FERLEK!	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	□ YES ⊠ NO	
	to question above is "yes," please explain project situation ar	nd how the	
	nsure compliance with applicable requirements.		
Please add te	xt here		
Would the pro	oject involve or lead to:		

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Climate Security and Sustainable Development

54

	-		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	□ YES □ POTENTIALLY ⊠ NO	
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	□ YES □ NO ⊠ NA	
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to above question is "yes" has any risks identified in the risk assessment?	□ YES □ NO ⊠ NA	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN	Forestry (for example Afforestation/Reforestation) involving GMO planting? Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.	□ YES □ NO ⊠ NA	
description of	is "yes" or "potentially" to any of the above questions, please the project situation below. Also, provide justification and/or demonstrate compliance with applicable requirements.		
Please add te	xt here		
FEHLER! VE	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	N.FEHLER!	
VERWEISO	UELLE KONNTE NICHT GEFUNDEN WERDEN.		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	□ YES ⊠ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
Please add te	xt here		
Would the pro	oject involve or lead to:		
<u>FEHLER!</u> VERWEISO	any potential risk of pollutant release that cannot be avoided?	□ YES □ POTENTIALLY	

Gold Standard

<u>KONNTE</u> <u>NICHT</u> <u>GEFUNDEN</u> <u>WERDEN.</u>		⊠ NO	
FEHLER!	If answer to above question is "Yes" or "potentially", has	□ YES	
VERWEISO	the project identified all potential pollution sources that may	□ NO	
	degrade the quality of soil, air, surface, and groundwater in the project area?	⊠ NA	
<u>NICHT</u> GEFUNDEN WERDEN.			
FEHLER!	If answer to above question is "Yes" or "potentially", do the	□ YES	
VERWEISO	pollution prevention and control technologies and practices	□ NO	
UELLE KONNTE	applied during the project life cycle align with national regulations or international best practices?	⊠ NA	
<u>NICHT</u> GEFUNDEN			
WERDEN.			
FEHLER! VERWEISO	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented,	□ YES	
UELLE	and resources are protected?	□ NO	
KONNTE	·	🖂 NA	
NICHT			
<u>GEFUNDEN</u> WERDEN.			
If the answer	is "yes" or "potentially" to any of the above questions, please	provide a brief	
description of	the project situation below. Also, provide justification and/or	evidence as	
necessary to demonstrate compliance with applicable requirements.			
Please add text here			
FEHLER! VE	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	N.FEHLER!	
VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.			

FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	□ YES ⊠ NO

Gold Standard

NICHT	
GEFUNDEN	
WERDEN.	

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements. *Please add text here....*

Would the project involve or lead to:

would the pro		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	the generation and management of waste materials?	□ YES □ POTENTIALLY ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	treatment, destruction, or disposal of waste material?	□ YES □ NO ⊠ NA
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to above question is "Yes", does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	□ YES □ NO ⊠ NA
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to above question is "yes", does project has measures in place to address health risks?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase- outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	□ YES □ POTENTIALLY ⊠ NO

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If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. *Please add text here....*

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve the use of chemical pesticides?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	□ YES ⊠ NO
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	□ YES ⊠ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements. *Please add text here....*

Would the project involve or lead to:

FEHLER! VERWEISO	chemical pesticides use for pest management?	□ YES □ POTENTIALLY
<u>UELLE</u> KONNTE		⊠ NO
<u>NICHT</u> GEFUNDEN WERDEN.		
FEHLER! VERWEISO UELLE	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	□ YES □ NO
KONNTE NICHT		⊠ NA
<u>GEFUNDEN</u> WERDEN.		

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FEHLER!	purchase, store, use, manufacture, or trade in Class II	□ YES
VERWEISO	(moderately hazardous) pesticides?	POTENTIALLY
UELLE		⊠ NO
KONNTE NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	If answer to question above is "yes" or "potentially", does	□ YES
VERWEISO	project has appropriate controls on manufacture,	□ NO
UELLE	procurement, or distribution and/or use of these chemicals?	
KONNTE		⊠ NA
<u>NICHT</u> GEFUNDEN		
WERDEN.		

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Please add text here....

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have a risk of unsustainable forest management, including timber harvesting?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	□ YES ⊠ NO
	to any of the questions above is "yes," please explain project act will ensure compliance with applicable requirements.	situation and

Please add text here....

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

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	Does the project involve the risk of negatively influencing access to and availability of food for people affected? to the question above is "yes," please explain project situationsure compliance with applicable requirements. xt here	□ YES ⊠ NO n and how the	
Would the project involve or lead to:			
FEHLER!	modification of the quantity or nutritional quality of food	□ YES	
<u>VERWEISO</u> UELLE	available such as through crop regime alteration or export or economic incentives?	POTENTIALLY	
KONNTE		⊠ NO	
<u>NICHT</u> GEFUNDEN WERDEN.			
	is "yes" or "potentially" to the above question, please provide	a brief	
description of	the project situation below. Also, provide justification and/or	evidence as	
	demonstrate compliance with applicable requirements.		
Please add te	xt here		
	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE UELLE KONNTE NICHT GEFUNDEN WERDEN.	N. FEHLER!	
FEHLER!			
VERWEISO	Does the project involve any risks to animal welfare?		
UELLE	Animal welfare shall be ensured by providing access to	□ YES	
<u>KONNTE</u> NICHT	water and food, appropriate environment, humane	🛛 NO	
GEFUNDEN	treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.		
WERDEN.	be treated as an inimediate non-comonnity.		
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	□ YES ⊠ NO	
FEHLER! VERWEISO UELLE KONNTE NICHT	Does the project involve the risk of administering synthetic growth promoters, including hormones?	□ YES ⊠ NO	

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GEFUNDEN WERDEN.		
	to any of the questions above is "yes," please explain project	situation and
	ect will ensure compliance with applicable requirements.	
Please add te	xt here	
Would the pro	oject involve or lead to:	
FEHLER!	animal husbandry or harvesting of fish populations or other	□ YES
VERWEISO	aquatic species? ⁴	□ NO
UELLE		⊠ NA
KONNTE		
<u>NICHT</u> GEFUNDEN		
WERDEN.		
FEHLER!	limiting access for animals to basic needs like drinking	□ YES
VERWEISO	water, adequate food, daylight, appropriate shelter etc.?	□ POTENTIALLY
UELLE		× NO
KONNTE NICHT		
GEFUNDEN		
WERDEN.		
<u>FEHLER!</u> VERWEISO	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	
UELLE		□ NO
KONNTE		⊠ NA
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	□ YES
<u>VERWEISO</u> UELLE		□ NO
KONNTE		🖂 NA
NICHT		
GEFUNDEN		
WERDEN.		
FEHLER!	inadequate measures to ensure that animals are exposed to	□ YES
VERWEISO	the least stress possible during transportation and slaughtering?	□ NO
<u>UELLE</u> KONNTE		🖂 NA
NICHT		
		I

⁴ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

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GEFUNDEN WERDEN.		
FEHLER! VERWEISO UELLE KONNTE NICHT	inappropriate spacing per animal and stocking rates per land unit?	□ YES □ NO ⊠ NA
GEFUNDEN WERDEN.		
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	inadequate measures to address the specific needs of aquatic animals?	□ YES □ NO ⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	□ YES □ NO ⊠ NA
description of	is "yes" or "potentially" to any of the above question, please the project situation below. Also, provide justification and/or demonstrate compliance with applicable requirements.	
Please add te	xt here	
	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE UELLE KONNTE NICHT GEFUNDEN WERDEN.	N.FEHLER!
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	□ YES ⊠ NO
FEHLER! VERWEISO UELLE	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including	□ YES ⊠ NO

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how the proje Please add te		situation and
would the pro	oject involve or lead to:	
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	identified habitats as HCV areas and or Critical habitats?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	□ YES □ NO ⊠ NA
FEHLER! VERWEISQ UELLE KONNTE NICHT GEFUNDEN WERDEN.	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	□ YES □ NO ⊠ N/A
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISQ UELLE KONNTE NICHT GEFUNDEN WERDEN.	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	□ YES □ No ⊠ NA
FEHLER! VERWEISO	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or	YES No

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UELLE KONNTE NICHT GEFUNDEN WERDEN.	degradation of the habitat and to enhance the habitat as part of its development?	⊠ NA
FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	□ YES □ No ⊠ NA
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	□ YES □ NO ⊠ NA
description of	is "yes" or "potentially" to any of the above question, please the project situation below. Also, provide justification and/or demonstrate compliance with applicable requirements.	
Please add te	xt here	
	ERWEISQUELLE KONNTE NICHT GEFUNDEN WERDE	N.FEHLER!
FEHLER!	UELLE KONNTE NICHT GEFUNDEN WERDEN.	
VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	□ YES ⊠ NO
	to question above is "yes," please explain project situation an	id how the
project will er Please add te	nsure compliance with applicable requirements.	
Would the pro	oject involve or lead to:	

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FEHLER! VERWEISO	If answer to the above question is "yes", does the project plan to protect and enhance them?	□ YES □ POTENTIALLY
UELLE KONNTE NICHT GEFUNDEN		□ NO ⊠ N/A
WERDEN. FEHLER! VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	□ YES □ NO ⊠ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Please add text here....

FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN.

FEHLER!	Does project introduce any alien species (not currently	□ YES
VERWEISQ	established in the country or region of the project) into new	🛛 NO
UELLE	environments?	
KONNTE		
NICHT		
GEFUNDEN		
WERDEN.		

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here....

Would the project involve or lead to:

FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	□ YES □ POTENTIALLY ⊠ NO
FEHLER! VERWEISO UELLE KONNTE NICHT	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	□ YES □ POTENTIALLY ⊠ NO

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<u>GEFUNDEN</u> WERDEN.				
FEHLERI VERWEISO UELLE KONNTE NICHT GEFUNDEN WERDEN.	risk of spreading alien species into areas in which they have not already been established?	□ YES □ POTENTIALLY ⊠ NO		
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.				
Please add text here				

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	atmosfair gGmbH
Registration number	Handelsregister: 13789
with relevant authority	Registergericht: Bonn
Street/P.O. Box	Zossener Straße 55-58
Building	-
City	Berlin
State/Region	Berlin
Postcode	10961
Country	Germany
Telephone	+49 (0) 30 120 84 80 - 0
E-mail	info@atmosfair.de
Website	www.atmosfair.de/en
Contact person	Nele Erdmann
Title	Senior Project Developer
Salutation	-
Last name	-
Middle name	-
First name	-
Department	-
Mobile	-
Direct tel.	-
Personal e-mail	erdmann@atmosfair.de

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APPENDIX 3 - LUF ADDITIONAL INFORMATION

Risk of change to the Project Area
during Project Certification Period:
Risk of change to the Project activities
during Project Certification Period:
Land-use history and current status of Project Area:
Project Area.
Socia Economic history
Socio-Economic history:
Forest management applied (past and future)
Forest characteristics (including main
tree species planted)
Main social impacts (risks and benefits)
Main environmental impacts (risks and
benefits)
Financial structure
Infrastructure (roads/houses etc):
Water bodies:
water boules:
Sites with
special significance for indigenous p
eople and local communities -
resulting from the
Stakeholder Consultation:
Where indigenous people and local communities are situated:
communities are situated.
Where indigenous people and local communities have legal rights,
customary rights or sites with special
cultural, ecological, economic, religious
or spiritual significance:

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APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

>>

In the initial project, the project is focused on the Toto region in Nasarawa State, and refurbished and inactive distribution grid, installed a 350kWp photovoltaic (PV) solar plant, 700kWh of battery storage, and 500kVA diesel backup generator. The result is a 24/7 power availability, simulating local economic development and offering cost-effective, clean electricity to over 2,000 customers.

Atmosfair gGmbH, in collaboration with local partners, aims to expand its efforts in rural electrification in Nigeria which is also considered in the design certified PDD. As part of this expansion, we intend to include areas currently relying on the national grid in the baseline within the project scope.

This design change to include a different baseline scenario is rooted in several compelling reasons:

1. Existing Energy Deficit: Numerous regions across Nigeria presently contend with significant electricity shortages from the national grid. We will conduct an assessment of the existing demand, viability, and feasibility for the prospective area and take appropriate action to address these issues. As an example, consider the Park Road area in Akwa Ibom State, which represents a potential expansion zone. A daily peak load is recorded by the Abuja Disco to indicate peak load and supply to the street, as it is shown in the Fig.1, the Park Road area experiences 13 hours outage. This locality presently grapples with extensive electricity shortages from the national grid, where daily outages surpass 50% of the available hours. This critical situation emphasizes the pressing demand for a dependable and continuous electricity supply.

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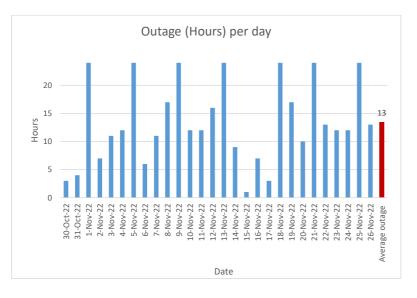


Figure 1: Outage profile in ParkRoad area

2. Economic Potential: Possible project expansions encompass the incorporation of a commercial and industrial hub alongside residential zones. The extension of the mini-grid initiative has the potential to stimulate economic development, entice enterprises, and improve the quality of life for the local populace by mitigating the energy shortfall. Moreover, it is crucial to acknowledge that recurrent power interruptions have a substantial impact on the daily routines of individuals, and this expansion of the project can play a vital role in offering essential support to the community in addressing this issue.

The following permanent changes on the PDD are required:

This strategic move addresses the pressing need for improved electricity access in the region and will inevitably have implications for the applicability (section B2 of the PDD), the additionality (section B5 of the PDD) and calculation methods of baseline emissions (section B6.2 and B6.3 of the PDD).

Change in section B2:

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The additional mini-grid(s), adhering to applicability requirement 2.2.4⁵ in the CDM methodology "AMS-I.F. Renewable electricity generation for captive use and mini-grid version 5.0", involves a capacity addition, in so far that the Greenfield plant is connected to an existing national grid source, while in the initial phase the project scope is only limited to the Greenfield plant. This adjustment to the project scope necessitates a revaluation of emissions and emissions reduction calculations. Design changes will be made to the applicability requirements 2.2.4:

2.2.4 The new hybrid mini-grid supplies electricity to a mini-grid system where in the Baseline all generators would use exclusively diesel fuel or displaces grid electricity consumption and/or captive fossil fuel electricity generation at the user end.

The project type will be expanded according to requirements 2.2.4.

Change in section B5:

The description of additionality will be slightly changed, see in red. "It will significantly improve access to electricity for the local communities, households and SMEs, which had **no or insufficient electricity supply beforehand** or since over 2 years.

Change in section B6.2:

The grid emission factor is included as an ex ante parameter.

Change in section B6.3:

For emission reduction, the paragraph 5.2.21 will be added to determine the emission factor for grid emission.

"Baseline emissions for other systems are the product of amount electricity displaced with the electricity produced by the renewable generating unit and an emission factor."

Following sentences will be added:

In the case where the project baseline includes electricity supply through the national grid, the emission factor used will be 0.573 tCO2/MWh for the share of electricity

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⁵ Project displaces grid electricity consumption and/or captive fossil fuel electricity generation at the user end.

provided by the national grid. The calculation for a 100% share of national grid in the baseline, would look as follow:

 $BE_y = EG_{BL,y} \times EF_{CO2,y} = 10853 \times 0.573 = 6218 t CO2$

The project portfolio included within the PDD and such the share of projects which are replacing exclusively diesel fuel and the share of the ones displacing national grid electricity is not known yet. So for the estimated emission reduction declared within the PDD we decided to use the case with the highest baseline emissions, which would be that all projects are replacing exclusively diesel fuel.

A4.2. Describe the impacts of design change on the following

a. Additionality

>> There will be the following change to the aspect of additionality: Next to customers without electricity, also customers with insufficient electricity supply will benefit from the project.

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

>> The project's scope will be broadened to encompass activities according to 2.2.4

c. Compliance with the monitoring plan of the applied methodology

>> A parameter will be added to the monitoring plan.

Compliance with the applied methodology:

This proposed design change is in line with overall guidance of the methodology "AMS-I.F. Renewable electricity generation for captive use and mini-grid version 5.0"

Compliance with the applied monitoring plan:

The calculation of the future emission reduction generated by this project is in line with the monitoring plan stated in the methodology "AMS-I.F. Renewable electricity generation for captive use and mini-grid version 5.0" with one additional fixed parameter due to the baseline addition. The following parameter is added for monitoring plan of SDG 13.

Data / Parameter	EFCO2,y
Unit	T CO2/MWh

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Description	Carbon dioxide emission factor for regional/national grid mix
Source of data	AMS-I.F.: Renewable electricity generation for captive use and mini-grid Version 05.0
Value(s) applied	0.573
Choice of data or Measurement methods and procedures	IGES_GRID_EF_v11.1_20230318 https://www.iges.or.jp/en/pub/list-grid-emission- factor/en
Purpose of data	Calculation of baseline emission
Additional comment	-

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

>> Baseline emission for newly added area and emission reduction will be conducted based on proposed adjustment when the new installations area are in operation. It will be assured that the overall emission reduction generated by the project will be less than 10,000t CO2eq.

e. Scale of the project activity

>> There will be no alterations to the aspect of project scale, the project remains a micro-scale project.

f. Stakeholder consultation

>> Stakeholders within the expansion area will receive comprehensive project briefings, and their valuable input will be thoughtfully considered during the decision-making process.

g. Sustainable development criteria

>> Changes will be made to the calculation of the contribution to SDG 13. For the calculation of emission reduction, the paragraph 5.2.21 will be added to determine the emission factor for grid emission.

h. Safeguarding assessment

>> There will be no alterations to the aspect of Safeguarding Assessment

Gold Standard *Climate Security and Sustainable Development*

i. Compliance with applicable legislation

>> No alterations will be made in the aspects of legal legislation

Emission Reductions Before Change (as per PDD)	8,682
Emission Reductions After Change (as per PDD)	8,682

No change of the emission reductions are considered as the final installation portfolio covered under the project is not defined yet. In the case new projects/installations have national grid access in the baseline the total emission reductions will be less.

j. <u>Only for LUF Projects</u>: Transparent summary of all approved changes in Project Area, Eligible Area and accompanying changes in ex-ante emissions removals.

DATE OF APPROVED DESIGN CHANGE (MM/DD/YYYY)	PROJECT	AREA (HA)	ELIGIBLE	AREA (HA)		ESTIMATE O2E)
	INCREASE OR DECREASE ?	VALUE (HA)	INCREASE OR DECREASE?	VALUE (HA)	INCREASE OR DECREASE ?	PERCENTAG E (%)

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Revision History

Version	Date	Remarks
1.5	29 June 2023	Editorial changes to match V2.1 of the Safeguarding Principles Requirements
1.4	21 June 2023	Editorial changes to match V2.0 of the Safeguarding Principles Requirements
1.3	14 April 2023	Integrated the design change memo as annex of the document. Editorial changes
1.2	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption

1.0 10 July 2017 Initial adoption

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